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THE

VACCINE INQUIRER;

OR,

MISCELLANEOUS COLLECTIONS

Relative to Vaccination.

BY A SOCIETY OF PHYSICIANS.

25809 Hist.

No. I.

AN INQUIRY

Into the Causes and Effects of the Variolæ Vaccinæ, a disease discovered in some of the western counties of England—particularly Gloucestershire, and known by the name of the Cow Pox. *By* EDWARD JENNER, *M. D. F. R. S.*

——————Quid nobis certius ipsis
Sensibus esse potest, quo vera ac falsa notemus.—*Lucretius.*

(*Printed for the Author, in London*, 1798.)

THE deviation of man from the state in which he was originally placed by nature seems to have proved to him a prolific source of diseases. From the love of splendour, from the indulgences of luxury, and from his fondness for amusement, he has familiarised himself with a great number of animals, which may not originally have been intended for his associates.

The wolf, disarmed of ferocity, is now pillowed in the lady's lap.*—The cat, the little tiger of our island,

* The late Mr. Hunter proved, by experiments, that the dog is the wolf in a degenerated state.

whose natural home is the forest, is equally domesticated and caressed. The cow, the hog, the sheep, and the horse, are also, for a variety of purposes, brought under his care and dominion.

There is a disease to which the horse, from his state of domestication, is frequently subject. The farriers have termed it the grease. It is an inflammation and swelling in the heel, from which issues matter, possessing properties of a very peculiar kind, which seems capable of generating a disease in the human body (after it has undergone the modification which I shall presently speak of) which bears so strong a resemblance to the small pox, that I think it highly probable, it may be the source of that disease.

In this dairy country, a great number of cows are kept, and the office of milking is performed indiscriminately, by men and maid servants. One of the former, having been appointed to apply dressings to the heels of a horse affected with the grease, and not paying due attention to cleanliness, incautiously bears his part in milking the cows, with some particles of the infectious matter adhering to his fingers.

When this is the case, it commonly happens that a disease is communicated to the cows, and from the cows to the dairy maids, which spreads through the farm until most of the cattle and domestics feel its unpleasant consequences. This disease has obtained the name of the cow pox. It appears on the nipples of the cows in the form of irregular pustules. At their first appearance they are commonly of a palish blue, or rather of a colour approaching to livid, and are surrounded by an erysipelatous inflammation. These pustules, unless a timely remedy be applied, frequently degenerate into phage-

denic ulcers, which prove extremely troublesome.* The animals become indisposed, and the secretion of milk is much lessened. Inflamed spots now begin to appear on different parts of the hands of the domestics employed in milking, and sometimes on the wrists, which quickly run on to suppuration, first assuming the appearance of the small vesications produced by a burn. Most commonly they appear about the joints of the fingers, and at their extremities; but whatever parts are affected, if the situation will admit, these superficial suppurations put on a circular form, with their edges more elevated than their centre, and of a colour distantly approaching to blue—absorption takes place, and tumours appear in each axilla. The system becomes affected, the pulse is quickened, and shiverings, succeeded by heat, with general lassitude, and pains about the loins and limbs, with vomiting, come on. The head is painful, and the patient is now and then affected with delirium. These symptoms, varying in their degrees of violence, generally continue from one day to three or four, leaving ulcerated sores about the hands, which, from the sensibility of the parts, are very troublesome, and commonly heal slowly, frequently becoming phagedenic, like those from whence they sprung. The lips, nostrils, eyelids, and other parts of the body, are sometimes affected with sores, but these evidently arise from their being heedlessly rubbed or scratched, from the patient's infected fingers. No eruptions on the skin have followed the decline of the feverish symptoms in any instance that has come under my inspection, one only excepted, and in this case a very

* They who attend sick cattle in this country, find a speedy remedy for stopping the progress of this complaint, in those applications which act chemically upon the morbid matter, such as solutions of the vitriolum zinci, the vitriolam cupri, &c.

few appeared on the arms: they were very minute, of a vivid red colour, and soon died away without advancing to maturation; so that I cannot determine whether they had any connection with the preceding symptoms.

Thus the disease makes its progress from the horse to the nipple of the cow, and from the cow to the human subject.

Morbid matter of various kinds, when absorbed into the system, may produce effects in some degree similar; but what makes the cow pox virus so extremely singular, is, that the person who has been thus infected, is for ever after secure from the infection of the small pox;—neither exposure to the variolous effluvia, nor the insertion of the matter into the skin, producing this distemper.

In support of so extraordinary a fact, I shall lay before my reader a great number of instances.*

* It is necessary to observe that pustulous sores frequently appear spontaneously on the nipples of cows, and instances have occurred, though very rarely, of the hands of the servants employed in milking, being affected with sores in consequence, and even of their feeling an indisposition from absorption. These pustules are of a much milder nature than those which arise from that contagion which constitutes the true cow pox. They are always free from the blueish or vivid tint, so conspicuous in the pustules, in that disease. No erysipelas attends them, nor do they shew any phagedenic disposition, as in the other case; but quickly terminate in a scab, without creating any apparent disorder in the cow. This complaint appears at various seasons of the year, but most commonly in the spring, when the cows are first taken from their winter food, and fed with grass. It is very apt to appear also, when they are suckling their young. But this disease is not to be considered as similar in any respect, to that of which I am treating, as it is incapable of producing any specific effects on the human constitution. However, it is of the greatest consequence to point it out here—lest the want of discrimination should occasion an idea of security from the infection of the small pox, which might prove delusive.

CASE I.

Joseph Merret, now an under-gardener to the earl of Berkely, lived as a servant with a farmer near this place in the year 1770, and occasionally assisted in milking his master's cows. Several horses belonging to the farm, began to have sore heels, which Merret frequently attended. The cows soon became affected with the cow pox, and soon after several sores appeared on his hands. Swellings and stiffness in each axilla followed; and he was so much indisposed for several days, as to be incapable of pursuing his ordinary employment. Previously to the appearance of the distemper among the cows, there was no fresh cow brought into the farm, nor any servant employed who was affected with the cow pox.

In April, 1795, a general inoculation taking place here, Merret was inoculated with his family; so that a period of twenty-five years had elapsed from his having the cow pox to this time. However, though the variolous matter was repeatedly inserted into his arm, I found it impracticable to infect him with it; an efflorescence only of an erysipelatous look about the centre appearing on the skin near the punctured parts. During the whole time that his family had the small pox, one of whom had it very full, he remained in the house with them, but received no injury from exposure to the contagion.

It is necessary to observe, that the utmost care was taken, to ascertain with the most scrupulous precision, that no one whose case is here adduced, had gone through the small pox previous to these attempts to produce that disease.

Had these experiments been conducted in a large city, or a populous neighbourhood, some doubts might have been entertained; but here, where population is thin, and where such an event as a person's having the small pox is always faithfully recorded, no risk of inaccuracy in this particular can arise.

CASE II.

Sarah Portlock, of this place, was infected with the cow pox, when a servant at a farmers in the neighbourhood, twenty-seven years ago.*

In the year 1792, conceiving herself from this circumstance, secure from the infection of the small pox, she nursed one of her own children, who had accidentally caught the disease, but no indisposition ensued. During the time she remained in the infected room, variolous matter was inserted into both her arms, but without any further effect than in the preceding case.

CASE III.

John Philips, a tradesman of this town, had the cow pox at so early a period as nine years of age. At the age of sixty-two I inoculated him, and was very careful in selecting matter in its most active state. It was taken from the arm of a boy just before the commencement of the eruptive fever, and instantly inserted. It very speedily produced a sting-like feel in the part; an efflorescence appeared, which on the fourth day was rather extensive, and some degree of pain and stiffness were felt about the shoulder; but on the fifth day these symp-

* I have purposely selected several cases in which the disease had appeared, at a very distant period previous to the experiments made with variolous matter, to shew that the change produced in the constitution is not affected by time.

toms began to disappear, and in a day or two after went entirely off without producing any effect on the system.

CASE IV.

Mary Barge, of Woodford, in this parish, was inoculated with variolus matter, in the year 1791. An efflorescence of a palish red colour soon appeared about the parts where the matter was inserted, and spread itself rather extensively, but died away in a few days, without producing any variolous symptoms.* She has since been repeatedly employed as a nurse to small pox patients, without experiencing any ill consequences. This woman had the cow pox, when she lived in the service of a farmer in this parish, thirty-one years before.

CASE V.

Mrs. H——, a respectable gentlewoman of this town, had the cow pox when very young. She received the infection in rather an uncommon manner; it was given by means of her handling some of the same utensils,† which were in use among the servants of the family, who had the disease from milking infected cows. Her hands had many of the cow pox sores upon them, and

* It is remarkable that variolus matter, when the system is disposed to reject it, should excite inflammation on the part, to which it is applied, more speedily, than when it produces the small pox. Indeed, it becomes almost a criterion, by which we can determine whether the infection will be received or not. It seems as if a change, which endures through life, had been produced in the action, or disposition to action, in the vessels of the skin; and it is remarkable too, that whether this change has been effected by the small pox or the cow pox, that the disposition to sudden cuticular inflammation is the same, on the application of variolous matter.

† When the cow pox has prevailed in the dairy, it has often been communicated to those who have not milked the cows, by the handle of the milk pail.

they were communicated to her nose, which became inflamed and very much swoln. Soon after this event, Mrs. H. was exposed to the contagion of the small pox, where it was scarcely possible for her to have escaped, had she been susceptible of it, as she regularly attended a relative, who had the disease in so violent a manner, that it proved fatal to him. In the year 1778, the small pox prevailed very much at Berkely, and Mrs. H. not feeling perfectly satisfied respecting her safety, (no indisposition having followed her exposure to the small pox,) I inoculated her with active variolous matter; the same appearance followed as in the preceding cases—an efflorescence on the arm, without any effect on the constitution.

CASE VI.

It is a fact so well known among our dairy farmers, that those who have had the small pox, either escape the cow pox, or are disposed to have it slightly; that as soon as the complaint shews itself among the cattle, assistants are procured, if possible, who are thus rendered less susceptible of it, otherwise the business of the farm could scarcely go forward.

In the month of May, 1796, the cow pox broke out at Mr. Baker's, a farmer, who lives near this place. The disease was communicated by means of a cow, which was purchased in an infected state, at a neighbouring fair, and not one of the farmer's cows, (consisting of thirty,) which were at that time milked, escaped the contagion. The family consisted of a man servant, two dairy maids, and a servant boy, who, with the farmer himself, were twice a day employed in milking the cattle; the whole of this family, except Sarah Wynne, one of the dairymaids, had gone through the small pox. The

consequence was, that the farmer and the servant boy escaped the infection of the cow pox entirely, and the servant man and one of the maid servants had each of them, nothing more than a sore on one of their fingers, which produced no disorder in the system. But the other dairymaid, Sarah Wynne, who never had the small pox, did not escape in so easy a manner. She caught the complaint from the cows, and was affected with the symptoms described in the third page, in so violent a degree, that she was confined to her bed, and rendered incapable for several days her ordinary vocations in the farm. March 28th, 1797, I inoculated this girl, and carefully rubbed the variolous matter into two slight incisions made upon the left arm. A little inflammation appeared in the usual manner, around the parts, where the matter was inserted, but so early as the fifth day, it vanished entirely, without producing any effect on the system.

CASE VII.

Although the preceding history pretty clearly evinces, that the constitution is far less susceptible of the contagion of the cow pox, after it has felt that of the small pox, and those employed in milking cows, which are infected with the cow pox, either escape the disorder, or have sores on the hands, without feeling any general indisposition; yet the animal economy is subject to some variation in this respect, which the following relation will point out.

In the summer of the year 1776, the cow pox appeared at the farm of Mr. Andrews, a considerable dairy, adjoining to the town of Berkely. It was communicated, as in the preceding instance, by an infected cow purchased at a fair in the neighbourhood. The family

consisted of the farmer, his wife, two sons, a man and a maid servant; all of whom, except the farmer, (who was fearful of the consequences,) bore a part in milking the cows. The whole of them, exclusive of the man servant had regularly gone through the small pox; but in this case no one who milked the cows, escaped the contagion. All of them had sores upon their hands, and some degree of general indisposition, preceded by pains and tumours in the axillæ; but there was no comparison in the severity of the disease, as it was felt by the servant man, who had escaped the small pox, and by those of the family who had not; for while he was confined to his bed, they were able without much inconvenience, to follow their ordinary business.

February the 13th, 1797, I availed myself of an opportunity, of inoculating William Rodway, the servant man above alluded to. Variolous matter was inserted into both his arms; in the right by superficial incisions, and into the left by slight punctures into the cutis. Both were perceptibly inflamed on the third day. After this, the inflammation about the punctures soon died away; but a small appearance of erysipelas was manifest about the edges of the incisions, till the eighth day, when a little uneasiness was felt for the space of half an hour in the right axilla. The inflammation then hastily disappeared, without producing the most distant affection of the system.

CASE VIII.

Elizabeth Wynne, aged fifty-seven, lived as a servant with a neighbouring farmer thirty-eight years ago. She was then a dairymaid, and the cow pox broke out among the cows. She caught the disease with the rest of the family; but compared with them, had it in a very slight

degree, one very small sore only breaking out on the little finger of the left hand, and scarcely any perceptible indisposition following it.

As the malady had shown itself in so slight a manner, and as it had taken place at so distant a period of her life, I was happy with the opportunity of trying the effects of variolous matter upon her constitution, and on the 28th of March, 1797, I inoculated her by making two superficial incisions on the left arm, on which the matter was cautiously rubbed. A little efflorescence soon appeared, and a tingling sensation was felt about the parts where the matter was inserted until the third day, when both began to subside, and so early as the fifth day it was evident that no indisposition would follow.

CASE IX.

Although the cow pox shields the constitution from the small pox, and the small pox proves a protection against its own future poison, yet it appears, that the human body is again and again susceptible of the infectious matter of the cow pox, as the following history will demonstrate.

William Smith, of Pyrton, in this parish, contracted this disease when he lived with a neighbouring farmer, in the year 1780. One of the horses belonging to the farm had sore heels, and it fell to his lot to attend him. By these means the infection was carried to the cows, and from the cows it was communicated to Smith. On one of his hands were several ulcerated sores, and he was affected with such symptoms as have been before described.

In the year 1791, the cow pox broke out at another farm, where he then lived as a servant, and he became

affected with it a second time, and in the year 1794, he was so unfortunate as to catch it again. The disease was equally as severe the second and third time as it was on the first.*

In the spring of the year 1795, he was twice inoculated, but no affection of the system could be produced from the variolous matter, and he has since associated with those who had the small pox in its most contagious state, without feeling any effect from it.

CASE X.

Simon Nichols, lived as a servant with Mr Bromedge, a gentleman who resides on his own farm in this parish, in the year 1782. He was employed in applying dressings to the sore heels of one of his master's horses, and at the same time assisted in milking the cows. The cows became affected in consequence, but the disease did not shew itself on their nipples till several weeks after he had begun to dress the horse. He quitted Mr. Bromedge's service and went to another farm, without any sores upon him; but here his hands soon began to be affected in the common way, and he was much indisposed, with the usual symptoms. Concealing the nature of the malady from Mr. Cole, his new master, and being there also employed in milking, the cow pox was communicated to the cows.

Some years afterwards, Nichols was employed on a farm where the small pox broke out, when I inoculated him, with several other patients, with whom he continued the whole time of their confinement. His arm inflamed; but neither the inflammation, nor his associating with the inoculated family, produced the least effect upon his constitution.

* This is not the case in general—a second attack is commonly very slight, and so, I am informed, among the cows.

CASE XI.

William Stinchcomb, was a fellow servant with Nichols, at Mr. Bromedge's farm, at the time the cattle had the cow pox, and he was unfortunately infected by them. His left hand was severely affected with several corroding ulcers, and a tumour of considerable size appeared in the axilla of that side. His right hand had only one small sore upon it, and no tumour discovered itself in the corresponding axilla.

In the year 1792, Stinchcomb was inoculated with variolous matter, but no consequences ensued beyond a little inflammation in the arm, for a few days. A large party were inoculated at the same time, some of whom had the disease in a more violent degree than is commonly seen from inoculation. He purposely associated with them, but could not receive the small pox.

During the sickening of some of his companions, their symptoms so strongly recalled to his mind his own state, when sickening with the cow pox, that he very pertinently remarked their striking similarity.

CASE XII.

The paupers of the village of Tortworth, in this county, were inoculated by Mr. Henry Jenner, surgeon, of Berkely, in the year 1795. Among them, eight patients presented themselves, who had, at different periods of their lives, the cow pox. One of them, Hester Walkly, I attended with that disease, when she lived in the service of a farmer in the same village, in the year 1782; but neither this woman, nor any other of the patients who had gone through the cow pox, received the variolous infection, either from the arm or from mixing in the society of the other patients, who were inoculated at the

same time. This state of security proved a fortunate circumstance, as many of the poor women were at the same time, in a state of pregnancy.

CASE XIII.

One instance has occurred to me of the system being affected from the matter issuing from the heels of horses, and of its remaining afterwards unsusceptible of the variolous contagion; another where the small pox appeared obscurely; and a third in which its complete existence was positively ascertained.

First, Thomas Pearce is the son of a smith and farrier, near to this place. He never had the cow pox; but in consequence of dressing horses with sore heels, at his father's, when a lad, he had sores on his fingers, which suppurated, and which occasioned a pretty severe indisposition. Six years afterwards, I inserted variolous matter into his arm repeatedly, without being able to produce any thing more than slight inflammation, which appeared very soon after the matter was applied, and afterwards I exposed him to the contagion of the small pox with as little effect.*

CASE XIV.

Secondly, Mr. Jame Cole, a farmer, in this parish, had a disease from the same source as related in the preceding case, and some years after was inoculated with variolous matter. He had a little pain in the axilla, and felt a slight indisposition for three or four hours. A

* It is a remarkable fact, and well known to many, that we are frequently foiled in our endeavour to communicate the small pox by inoculation, to blacksmiths, who, in the country, are farriers. They often, as in the above instance, either resist the contagion entirely, or have the disease anomalously. Shall we not be able now to account for this on a rational principle?

few eruptions shewed themselves on the forehead, but they very soon disappeared, without advancing to maturation.

CASE XV.

Although in the two former instances the system seemed to be secured, or nearly so, from variolous infection, by the absorption of matter from sores produced by the diseased heels of horses, yet the following case decisively proves, that this cannot be entirely relied upon, until a disease has been generated by the morbid matter from the horse, or the nipple of the cow, and passed through that medium to the human subject.

Mr. Abraham Riddiser, a farmer in Stone, in this parish, in consequence of dressing a mare that had sore heels, was affected with very painful sores in both his hands, tumours in each axilla, and severe and general indisposition. A surgeon in the neighbourhood attended him, who, knowing the similarity between the appearance of the sores upon his hands, and those produced by the cow pox, and being acquainted also with the effects of that disease on the human constitution, assured him that he never need to fear the infection of the small pox: but this assertion proved fallacious, for on being exposed to the infection, upwards of twenty years afterwards, he caught the disease, which took its regular course in a very mild way. There certainly was a difference perceptible, although it is not easy to describe it, in the general appearance of the pustules, from that which we commonly see. Other practitioners, who visited the patient at my request, agreed with me in this point, though there was no room left for suspicion as to the reality of the disease, as I inoculated some of the family from the pustules, who had the small pox with its usual appearances in consequence.

(To be Continued.)

HISTORY OF THE

INTRODUCTION OF VACCINATION

IN THE STATE OF MARYLAND.

After various unsuccessful attempts to introduce the kine pock into this state, some genuine vaccine matter was procured through the kind attention of Messrs. William and John Taylor. It was obtained by Mr. John Taylor, who was then in London, from one of the physicians of the inoculation hospital, at St. Pancras. He forwarded it to his brother, William Taylor, Esq. merchant, of this city, who gave it to the late worthy Dr. Miles Littlejohn.

Dr. Littlejohn put the whole of it for trial into the hands of Dr. James Smith, who was then attending as physician to the alms house, in Baltimore county; having at that time, Dr. William H. Clendinen, of this city, for his assistant. The vaccine virus received, was put up for its more certain preservation, in three different ways: Some on the blade of a lancette, some between small plates of glass; and some on thread which was thoroughly charged with it; and the whole was confined in a vial well corked and sealed.

The use of this remedy was commenced with this virus in the state of Maryland, on the first day of May, 1801, with all possible care; and a regular history of every case was daily entered on the books of the institution, as they progressed.

The physicians of Baltimore generally, were invited to inspect these cases; and offers were made to furnish them with virus: but no one could be prevailed on to

make any use of it, beyond the walls of the alms house, during the whole summer; notwithstanding the small pox was then prevailing in the city.

After these cases were all completed, and the subjects of them were fully exposed to the small pox by inoculation, and to the variolous contagion in the natural way, without being injured thereby, many of our citizens began to make inquiry about this *new thing* that had come among us.

In the Telegraph, (a news paper printed in this city) of the 3d and 5th December, of the same year, a full history of the vaccine inoculation as far as it had then progressed, was laid before the public by Dr. Smith, and vaccination has been ever since continued here without any interruption.

The kine pock had been introduced in the neighbourhood of Boston, during the summer of the preceding year, by Dr. Benjamin Waterhouse, who, from this circumstance, has been called the "Jenner of America." He succeeded in vaccinating his own family, and a few other persons, in August, 1800; but soon afterwards lost the infection, and had again to resort to another importation of it from England.

On the 9th Nov. same year, the vaccine infection was received in Philadelphia, by Mr. John Vaughan, from Mr. Jefferson, and was the first virus that was used successfully in the state of Pennsylvania.* Genuine vacci-

* "*Washington, November* 5, 1801.

"DEAR SIR,

"I received on the 24th ult. your favor of the 22d. but it is not till this day that I am enabled to comply with your request of forwarding some of the vaccine matter for Dr. Coxe. On my arrival at Monticello in July, I received from Dr. Waterhouse of Cambridge, some vaccine matter taken by himself, and some which he at the same

nation was not commenced in New York, until 1802: during which year, viz. on the 25th March, 1802, Dr. James Smith proposed and established his vaccine institution in the city of Baltimore, for the preservation and distribution of the vaccine matter; and it was afterwards extended with unparalleled rapidity, over the whole of the United States.

time received from Dr. Jenner of London. Both of them succeeded, and exhibited precisely the same aspect and affection. In the course of July and August, I inoculated about seventy or eighty of my own family; my sons in law about as many of theirs, and including our neighbours who wished to avail themselves of the opportunity, our whole experiment extended to about two hundred persons. One only case was attended with much fever and some delirium; and two or three with sore arms which required common dressings. All these were from accidents too palpable to be ascribed to the simple disease. About one in five or six had slight feverish dispositions, and more perhaps had a little head-ach, and all of them had swellings of the axillary glands, which in the case of adults disabled them from labour one, two, or three days. Two or three only had from two to half a dozen pustules on the inoculated arm, and no where else, and all the rest only the single pustule where the matter was inserted, something less than a coffee-bean, depressed in the middle, fuller at the edges, and well defined. As far as my observations went, the most premature cases presented a pellucid liquor the sixth day, which continued in that form the sixth, seventh, and eighth days, when it began to thicken, appear yellowish, and to be environed with inflammation. The most tardy cases offered matter on the eighth day, which continued thin and limpid the eighth, ninth, and tenth days. Perceiving therefore that the most premature as well as the tardiest cases embraced the eighth day, I made that the constant day for taking matter for inoculation, say, eight times twenty-four hours from the hour of its previous insertion. In this way it failed to infect in not more I think than three or four out of the two hundred cases. I have great confidence therefore that I preserved the matter genuine, and in that state brought it to Dr. Gantt of this place on my return, from whom I obtained the matter I now send you, taken yesterday, from a patient of the eighth [illegible] as well as myself. In my neighbour-

BALTIMORE, MARCH 25, 1802.

Having considered the plan proposed by Doctor Smith, "to extend the benefits of the vaccine inoculation;" we feel much pleasure in expressing our approbation, of the liberal and humane views, therein contained; and would recommend the same to the patronage and support of the public.

Wm. Gibson, *E. Finley*, *Tho: Dickson*, *Fred'k Shaffer*, *Wm. Lorman*, *Wm. Wilson*, *Patrick Bennet*, } Trustees of the Poor, for Baltimore County.

JAMES CALHOUN,
Mayor of the City of Baltimore.

hood we had no opportunity of obtaining variolous matter, to try by that test the genuineness of our vaccine matter; nor can any be had here, or Dr. Gantt would have tried it on some of those on whom the vaccination has been performed. We are very anxious to try this experiment, for the satisfaction of those here, and also those in the neighbourhood of Monticello, from whom the matter having been transferred, the establishment of its genuineness here will satisfy them. I am therefore induced to ask the favor of you to send me in exchange, some fresh variolous matter, so carefully taken and done up, that we may rely on it; you are sensible of the dangerous security which a trial with effete matter might induce. I should add that we never changed the regimen nor occupations of those inoculated; a smither at the anvil continued in his place without a moment's intermission, or indisposition. Generally it gives no more of disease than a blister as large as a coffee-bean produced by burning would occasion. Sucking children did not take the disease from the inoculated mother. These I think are the most material of the observations I made in the limited experiment of my own family. In Aikin's book which I have, you will find a great deal more. I pray you to accept assurances of my esteem and respect.

(Signed) "THOS. JEFFERSON.

"MR. JOHN VAUGHAN."

BALTIMORE, 25th MARCH, 1802.

We the undersigned, practising physicians in the city of Baltimore, approve of the vaccine inoculation, and recommend it as a certain preventative of the small pox.

George Brown,
Daniel Moore,
Nathaniel Potter,
John Coulter,
Robert Moore,
Joseph Alexander,
James Steuart,
P. Chatard,
R. Harris Archer,
Henry C. Howard,
Charles H. Winder,
L. M. Dunan,
Ashton Alexander,
John Crawford,
John D. Smith,
M. Littlejohn,
John C. Snyder,
John Owen,
John Campbell White,
Henry Keerl,
Joseph Way,
Colin Mackenzie.

FIRST CASE OF VACCINATION

IN THE STATE OF MARYLAND.

NANCY MALCUM, aged about seven years, was vaccinated on 1st May, 1801, with virus received from England. The virus on glass was inserted in the right arm. That on the lancette in the left.

May 5th. The virus has taken effect in the right arm. The part inoculated being raised and inflamed. Failed in the left.

Eighth Day.

May 8th. The part inoculated more elevated and inflamed—having nearly the same appearance as the common inoculation for the small pox on the 7th or 8th day.

Ninth Day.

May 9th. Had a slight fever last night, which yet continues, the vesicle which was formed over the part inoculated, appears more elevated this morning than yesterday—the inflammation more extensive.

Tenth Day,

May 10th. Was confined to bed most part of yesterday with fever, but appears to be quite well to-day, and is running about as lively as usual—a considerable quantity of *limpid* matter seems to be now formed in the vesication above mentioned.

Eleventh Day.

May 11th. The inflammation appears to be extending itself circularly around the pock, or part in which the matter was inserted. The edges of the pustule (which has now obtained a base as large as the diameter of a common pea) are raised up very considerably above the level surface of the skin, but in the centre it appears depressed, and sunk below its edges; no fever—and she is in good health.

Twelfth Day.

May 12th. Appearances the same as yesterday. No fever, nor any complaint except the soreness of the arm.

Thirteenth Day.

May 13th. The inflammation, with swelling, has extended to some distance over the arm most adjacent to the inoculation. An enlargement of one of the right axillary glands discoverd, but no symptom of fever has been observed since the 9th day.

Fourteenth Day.

May 14th. The efflorescence which yesterday surrounded the inoculated part, has almost disappeared, leaving the arm of a livid colour. A scab appears to be forming on the centre of the pustule. She enjoys good health.

Fifteenth Day.

May 15*th.* The whole pustule is now forming into a hard smooth round scab.

Nineteenth Day.

May 19*th.* The scab, which has a diameter of one fourth of an inch, appears to be more dry and hard. The cuticle surrounding it, is pealing off in the same manner as generally happens after a common boil.

May 31*st.* The scab which continued on her arm until this morning, appearing nearly disengaged, was taken off, leaving a tender skin underneath, without any soreness, or other complaint whatever.

Nancy Malcum's case—tested.

June 28*th.* Fifty-nine days having elapsed since her vaccination. Inoculated her with variolous matter taken from a good pock, about twenty days since.

Fourth Day.

July 1*st.* The inoculation with variolous matter appears as usual on the fourth day. Slightly raised and inflamed.

Eighth Day.

July 5*th.* The appearance of her arm this morning seems to indicate the approach of variolous fever, in consequence of her inoculation. Directed her to take fifteen grains of powdered jalap.

Ninth Day.

July 6*th.* The purgative powder administered yesterday, operated well, and the variolous inoculation again appears to decline—though not so much as entirely to remove every apprehension that she may yet take the small pox.

Eleventh Day.

July 8*th.* The variolous inoculation having now entirely disappeared—inoculated her again with fresh mat-

ter, just taken from a lady labouring under the natural small pox, in a violent degree.

Third Day.

July 10*th.* The part inoculated slightly inflamed.

Fifth Day.

July 12*th.* The variolous inoculation having again disappeared, I am perfectly satisfied that the genuine cow pock has been communicated in this instance, and that every danger of small pox is thereby removed, as intended. This patient being no longer susceptible of small pox.

SECOND CASE OF VACCINATION

IN THE STATE OF MARYLAND.

William Allen, aged about four years, was vaccinated on the 14th May, 1801, with virus taken from Nancy Malcum, which was inserted into his arm by a small puncture, between the cuticle and cutis.

May 18*th.* A slight redness of the part inoculated, is very perceptible.

May 19*th.* A vesicle has formed in consequence of the inoculation, and appears elevated and inflamed.

Seventh Day.

May 20*th.* The inflammation increases, and the vesication appears more raised.

Ninth Day.

May 22*d.* The vesication of the part inoculated, appears somewhat pustulous, and very nearly resembles such as would arise from the small pox inoculation, the inflammation very slight.

Tenth Day.

May 23*d.* The pustule appears more elevated this morning, and seems to contain a thin fluid. The inflam-

mation, which extends in a circular direction, now surrounds the tumour nearly one fourth of an inch. No disorder of the system has yet been discovered.

Six o'clock, P. M. Soon after I visited him this morning, he was seized with the usual symptoms of fever, at 11 o'clock, he was observed to be very restless and fretful, his fever high, pulse 120. This evening, however, he sits up, and seems better, but has still a smart fever and quick pulse (130.) The pustule now appears depressed towards its centre, and shews a much greater elevation of its edges. The inflammation has increased considerably, attended with a hard phlegmonous swelling, extending upwards of an inch in diameter. Observing an unusual inflammation to affect both his eyes this evening, but more particularly the right eye, I was informed that he received a bruise ten or twelve days before, which then inflamed his eyes, but which had disappeared a few days before he was inoculated.

Eleventh Day.

May 24th. His pulse are about 100 this morning, he is lively and running about, without any apparent complaint. The part inoculated retains nearly the same appearance as yesterday; from the edges of the pustule, when punctured, a limpid fluid exsudes freely, and stands in small clear drops. Some of this matter was taken on thread, and preserved for future use. The soreness, and inflammation of his eyes, have almost disappeared, except towards the inner canthus of his right eye, which is yet loaded with purulent matter.

Twelfth Day.

May 25th. The inflammation which surrounded the tumour, begins to disappear—the vesicle yet contains a quantity of limpid matter, he has a slight fever this morning, and seems chilly.

Thirteenth Day.

May 26*th.* The pustule which has now something of a blueish aspect, has enlarged its diameter in a small degree, and still continues full of a thin limpid fluid.

Fourteenth Day.

May 27*th.* The part inoculated has nearly the same appearance as yesterday.

Fifteenth Day.

May 28*th.* The pustule has scabbed over, and appears to dry; his appetite is good, and he plays with the other children as usual, being free from every complaint.

Sixteenth Day.

May 29*th.* Is perfectly well, a dry scab remains on his arm.

William Allen's case—tested.

June 28*th.* Forty five days since he was inoculated with the vaccine virus, I inoculated him with some of the same variolus matter, with which Nancy Malcum was inoculated, but without producing any material effect. That the experiment might be more complete and convincive, I procured some fresh matter from a case of the natural small pox, on the 15th November, with which I immediately inoculated him in the arm.

Third Day.

November 17*th.* The variolus inoculation has produced a slight inflammation, not more however, than is usual, when it succeeds properly.

Fifth Day.

November 19*th.* The inflammation has increased gradually since the 17th.

Sixth Day.

November 20*th.* The part inoculated appears raised up, with a little hardness, and is slightly inflamed, but not quite so much as yesterday.

Seventh Day.

November 21*st.* The inflammation of the arm again seems to increase.

Eighth Day.

November 22*d.* The arm considerably more inflamed to-day, and although he remains quite well, present appearances seem to threaten not a little danger, as to his safety.

Ninth Day.

November 23*d.* No fever, nor any apparent disorder has yet taken place, since his last inoculation his arm continues inflamed, though the inflammation does not increase; neither have any small pustules made their appearance round the place of inoculation, as is common on the ninth day.

Tenth Day,

November 24*th.* The pock has raised on the part inoculated, and filled with matter, but there has been no fever, nor is there any eruption to be seen.

Eleventh Day.

November 25*th.* The inoculation has declined very much since yesterday, and leaves only a dark coloured pustule, without any inflammation or other symptom of infection; two small pustles however, like small pox, made their appearance last night in the palm of his hand (right) which may most probably be attributed to his inoculation.

Sixteenth Day.

November 30*th.* The child continues well; every symptom of his last inoculation has disappeared. and there remains no doubt but the vaccine inoculation in him has proved an effectual remedy against the contagion of the small pox.

THIRD CASE OF VACCINATION

IN THE STATE OF MARYLAND.

JOHN BURTON, aged about five years, was vaccinated with virus taken from the arm of Nancy Malcum, and at the same time with William Allen.

FOURTH CASE OF VACCINATION

IN THE STATE OF MARYLAND.

NANCY BENNET, aged about three years, was vaccinated on the 15th May, 1801, with the lancet that was charged with the imported matter; but before using it in this case, it was inserted into the scab which was then forming on Nancy Malcum's arm, with the intention to procure virus for this case.

Fourth Day.

May 18*th.* The part inoculated slightly inflamed.

Fifth Day.

May 19*th.* Slight inflammation continues.

Sixth Day.

May 20*th.* Same as yesterday, with an elevated appearance.

Seventh Day.

May 21*st.* A vesicle formed, which has the appearance of a large pimple; her arm appears more inflamed and raised, resembling an inoculation for the small pox on the fourth or fifth day.

Eighth Day.

May 22*d.* Eight o'clock, A. M. The inflammation has increased considerably since yesterday, the pustule more elevated.

Six o'clock, P. M. Has a smart fever this evening, pulse 128, the inflammation continues to increase; the vesicle is more raised, full, and limpid, and on its highest part appears to contain a little, thin, limpid fluid.

Ninth Day.

May 23d. The pustule, which begins to assume a white aspect, is now very full of a clear, limpid fluid; the inflammation has extended itself circularly, and surrounds it about an inch; in its centre, and deeply seated, a dark speck is to be perceived; she is free from any complaint this morning, but is said by its mother to have been restless last night.

Tenth Day.

May 24th. The inflammation a little increased, but is still confined to a more narrow circumference than usual; no fever, and she appears to be lively.

Eleventh Day.

May 25th. The pustule has increased its size very considerably, and now appears depressed at its centre, with its edge more elevated; a dry scab is forming on its most depressed part; the inflammation extends circularly, and has now a diameter of nearly an inch; she has no fever, nor any affection of the axilla, and is running about quite well.

Twelfth Day.

May 26th. The pustule has increased its diameter still further than yesterday, and appears to contain a considerable quantity of matter, of a thicker consistence than usual; a considerable hardness of the adjacent integuments is perceptible, with an irregular extension of the inflammation; she appears unwell, is fretful, and her skin warmer than natural.

Thirteenth Day.

May 27th. The inflammation begins to lessen, she is quite well, free from any general indisposition.

Fourteenth Day.

May 28th. The pustule is drying very fast; the scab irregular, and of a yellow cast; the hardness of the subjacent parts yet remain.

Seventeenth Day.

June 1st. From having scratched off the scab too soon, the pustule seemed to have degenerated into a small ulcer of the purulent kind, but again seems disposed to scab and heal, without any trouble; she remains quite well, and has good health.

P. S. This child having been soon after her inoculation, removed from under my care, and out of the state, I was necessarily deprived of an opportunity of subjecting her to a trial of the small pox.

FIFTH CASE OF VACCINATION

IN THE STATE OF MARYLAND.

Ann Dillon, aged about three years, a healthy child, of fine florid complexion, was vaccinated with matter from William Allen, on the 23d May.

SIXTH CASE OF VACCINATION

IN THE STATE OF MARYLAND.

Peggy Sapp, aged about seven months, was vaccinated on the 1st June, from Ann Dillon,

SEVENTH CASE OF VACCINATION

IN THE STATE OF MARYLAND.

Maria Bennett, about six weeks old, was vaccinated on the 9th June, in both arms, with virus taken from Peggy Sapp.

EIGHTH CASE OF VACCINATION

IN THE STATE OF MARYLAND.

Betsy Stoltz, aged four months, vaccinated on the 10th June, 1801, with virus taken immediately from the arm of Peggy Sapp.

Third Day.

June 12th. The inoculation of the right arm has taken effect, that of the left has disappeared.

Fifth Day.

June 14th. A small elevated vesicle is formed by the inoculation, without any surrounding inflammation.

Sixth Day.

June 15th. The vesicle more elevated, with a slight degree of inflammation surrounding it.

Eighth Day.

June 17th. The inflammation extends itself circularly, the centre of the pustule is a little depressed, its edges considerably elevated above the level of the skin, no fever yet perceptible.

Ninth Day.

June 18th. The inflammation of the part inoculated, has increased to the diameter of an inch; no fever, nor any apparent indisposition; its mother, however, informs

that the child was more fretful and restless last night than usual.

Tenth Day.

June 19*th.* Passed another restless night, and appears to have a slight fever this morning. The pustule appears very full of a thin, limpid fluid, is more depressed at its centre, and raised round the edge, with an increase of the surrounding inflammatory efflorescence.

Twelfth Day.

June 21*st.* Has no fever, and appears quite well this morning, but is said to have been as restless last night, as she was the three nights preceding; the pustule preserves its peculiar aspect, as already described. The inflammation surrounding it begins to decrease.

Fifteenth Day.

June 24*th.* The pustule wears a dry scab: the inflammation has entirely disappeared, and the child is quite well.

Betsy Stoltz's Case—Tested.

Nov. 15*th. Sunday.* Not having any favourable opportunity to inoculate this child for the small pox during the summer, this experiment was postponed until this day, when having procured some good matter from the natural disease, it was introduced on a piece of thread into her right arm.

Third Day.

Nov. 17*th.* The variolous inoculatiou appears to have taken effect; slight inflammation of the part inoculated being very perceptible.

Fifth Day.

Nov. 19*th.* The inflammation of the arm increases.

Sixth Day.

Nov. 20*th.* The small pox inoculation appears as is

usual on the sixth day, when it takes effect, a small pock being already formed on the part inoculated.

Seventh Day.

Nov. 21*st.* The arm still more inflamed, every appearance indicating the approach of disease.

Eighth Day.

Nov. 22*nd.* The eighth day has now arrived, and yet no fever; the little pock which was formed on the sixth day, yet remains, but the inflammation has not increased since yesterday.

Ninth Day.

Nov. 23*d.* The variolus inoculation yet appears to threaten a lurking disease, the pock still continuing raised up and full of matter; but the child has not as yet been attacked with any fever, and she enjoys her usual uninterrupted health.

Tenth Day.

Nov. 24*th.* Every hope is now entertained that the variolus inoculation will not take effect; the inflammation appears *harmless*, and has lessened considerably since yesterday.

Eleventh Day.

Nov. 25*th.* The variolus inoculation dies away without producing any fever or disease whatever.

Fifteenth Day.

Nov. 29*th.* The child continues to enjoy her good health, and has not suffered any interruption of it from the small pox inoculation, which has now disappeared entirely.

VACCINATION CONTINUED.

IN THE STATE OF MARYLAND.

ROBERT LIFE, aged about two years, was vaccinated November 12th, with matter taken this morning on thread, from E. Levering's child, the matter inserted into the right arm, and into the calf of the left leg.

Third Day.

Nov. 14*th.* The leg and arm both appear slightly inflamed.

Fifth Day.

Nov. 16*th.* The inflammation of his arm has not increased any for two days past; that of his leg has progressed considerably, but without forming any vesication on the part inoculated.

Sixth Day.

Nov. 17*th.* The vaccine inoculation seems to revive on his arm, with a slight elevation of the part inoculated; the inflammation of his leg has also increased, but is remarkable for its very *irregular* appearance.

Seventh Day.

Nov. 18*th.* The inoculation on his arm appears more evident this morning, shewing a slight degree of inflammation where the matter was inserted; that on his leg has produced a small pustule, but the inflammation appears to decrease; his appetite is not so good, is a little fretful, but has no fever.

Eighth Day.

Nov. 19*th.* A vesicle has formed on his arm, but it is not attended with as much inflammation as is commonly observed.

Ninth Day.

Nov. 20*th.* The vesicle on his arm has enlarged, is of

a circular form, its edges more elevated than the centre. The inoculation on the leg appears stationary.

Tenth Day.

Nov. 21*st.* The vaccine inoculation appears to progress on the arm, but seems to decline on the leg.

Eleventh Day.

Nov. 22*nd.* A fever came on yesterday evening, which continued all night; has abated this morning, leaving him much indisposed, fretful and chilly. The pustules on his arm being very full of a thin, limpid matter, some of it was taken and preserved for future use. An inflammatory blush has spread in a circular direction from the pustule, and occupies nearly the size of a dollar.

Twelfth Day.

Nov. 23*d.* The inflammatory blush, which yesterday spread from the pustule, extended in a beautiful manner; and as it now recedes, leaves a white circle upon the arm, resembling in every particular, some of the cases of genuine cow pox, which I attended in the summer. He was now inoculated with some fresh variolus matter, taken from a case of natural small pox, and inserted very carefully on a piece of thread into his left arm.

Thirteenth Day.

Nov. 24*th.* The inflammation from the vaccine inoculation on his right arm, has declined very much; a scab is forming on the part inoculated; the child is lively and well, and has a good appetite.

Fourteenth Day.

Nov 25*th.* The vaccine innoculation continues to decline; the variolus inoculation appears to have taken as much effect, as is usual on the third day, when good matter is used.

Fifteenth Day.

Nov. 26th. The vaccine inoculation has nearly the same appearance as yesterday. The small pox inoculation has produced a slight inflammation on the arm, with a very sensible elevation of the part inoculated.

Sixteenth Day.

Nov. 27th. The redness of the arm, in consequence of the vaccine inoculation, is now confined to less than one half its former extent, a hard dark scab is formed on the part inoculated, and there only remains a hardness of the most adjacent parts, which gives him no uneasiness. The small pox inoculation has not progressed in the smallest degree, but seems rather to decline.

Seventeenth Day.

Nov. 28th. Both the vaccine and variolus inoculations (the latter without producing any disease) have declined so much as to require no farther attention.

OBSERVATIONS ON COW POX,

ACCOMPANYING THE PRECEDING CASES.

(*Published in the Telegraph, December 5th*, 1801.)

Of the many discoveries which the ingenuity of man can boast of, to facilitate his progress through life, or to remove the dangers which continually surround him, there are few, when considered in their whole extent, that can be placed in competition with the advantages which bid fair to rise from Dr. Jenner's discovery of the cow pock. Although indeed, the inoculation for the small

pox, had long since disarmed this worst of pestilential diseases of many of its terrors; yet there are none among us who have not witnessed its destructive ravages, among our own friends, or at our own doors; and there are few who have not experienced much trouble, pain, anxiety and distress, even when the disease was communicated to us in the mildest manner, and under every prospect of success. To remove these dangers, and to avoid all this distress, I would now recommend the adoption of the vaccine inoculation, to all who never having had the small pox, justly regard their own safety or that of their children and friends. But lest any one may be deceived by the flattering success which the first cases in this city have afforded, I feel it incumbent on me to accompany the statement just given, with some account of the difficulties which yet seem to be inseparable from the nature of the disease, and from which much danger may arise, if the subject should be too negligently attended to.

A considerable obstacle attending the new inoculation, appears to arise from the difficulty of procuring and preserving genuine matter: and it is to be feared, that we shall be occasionally, under the necessity, when we lose the matter, to resort to its first source in England: and it has been found by experience, that the virus will seldom preserve its efficacy a sufficient length of time to perform so long a voyage.

Another obstacle seems to arise from the difficulty of communicating the disease, when we are possessed of good matter. In my first essay, only one out of nine, took the disease, and many of the same patients were inoculated several times, and in the most careful manner: this might have been owing in a great measure, to the age of the matter used, but I have found the same

difficulty when I had kept it but a short time, and even when I made use of it on the instant it was taken, so that in completing the few cases just laid before the public, fifty or more inoculations have been performed.

Again, when the genuine disease has been communicated, it sometimes produces so slight an indisposition, (only a local affection,) that the negligent practitioner may be easily misled, and sometimes induced to believe he has given the true vaccine disease, in cases where his patient has not actually underwent that degree of *specific* fever, if I may be allowed the expression, which must necessarily take place from the genuine disease, before the disposition of the human body to receive the small pox can possibly be destroyed.

I shall mention only one other difficulty at this time—a difficulty which threatens not a little danger, to the unguarded extension of the new inoculation. It arises from our liability to make use of spurious matter; and this may happen not only when we take matter from a different or spurious disease, but, if we are to give credit to the opinions of the illustrious discoverer of vaccination, even when it is procured from the genuine cow pox itself, *should the matter be taken at an improper time.* In this way a spurious disease, it is said, has been in some places already communicated, and has not only brought the whole discovery into disrepute where it has happened, but has been productive of very serious and evil consequences.

JAMES SMITH,

Lemmon street, Baltimore, 3d Dec. 1801

SPURIOUS VACCINATION.

(From the Federal Gazette, of May 19th, 1810.)

Extract of a letter from Mr. Price, of Virginia, to Dr. James Smith, of Baltimore, dated

ROMNEY, April 18th, 1810.

"VACCINATION has been prevailing here by a gentleman of the faculty, whose experience I fear will not enable him to discriminate between the genuine and spurious pock. The matter he uses I am firmly of opinion is of the latter kind. I will explain the manner in which it affects, from which you will probably be enabled to judge. In three or four or sometimes not till six or seven days, it affects the arm with inflammation, which is immediately succeeded by a *yellowish* hard pock, which remains for three or four days; it then scabs and affords a purulent matter until the end of ten or twelve days or later; then the ulcer becomes cicatrized. Although through the whole course it never exhibits a vesicle of limpid matter, which I have always understood to be a criterion of the genuine pock. However not having confidence from my own experience, and being well aware of the necessity and importance of propagating the genuine kind, I have therefore in preference sent to you, whose experience, with the trouble and pains you have taken to obtain and preserve it genuine, will enable you to furnish me with some that is good. Any information you can furnish me with will be gratefully received and acknowledged, with a desire to compensate you for any trouble or expense that you may be at."

Extract of a Letter from Dr. Smith, in answer to the above, dated 28th April, 1810.

"I yesterday received your letter, and enclosed, I forward you some genuine vaccine matter, some on

thread, some on glass, and a part of a fresh crust or scab.

"Your apprehensions concerning the introduction of a spurious disease into your neighborhood, are I am of opinion, too well founded, and unless early apprized of this danger, I am afraid those who have taken it, will suffer severely by placing their dependence on it.

"In the genuine kine pock, the inflammation never takes place to any considerable extent before the eighth day after the insertion of the matter, and sometimes not for two or three days later. Any inflammation, therefore so early as you state it to have happened, must be ascribed to some other cause. Indeed this premature inflammation would destroy even the most genuine infection, had it been inserted: and however great the sore produced by it might have been, it would not afford any security against the small pox.

"A vaccine vesicle when completely formed about the eighth day, and from that to the twelfth day, is of *a pale white lead colour*—it is never of the yellowish colour you describe. The matter taken from a vaccine vesicle in its fluid state is always *limpid, and as clear and transparent as the purest water.* It has no resemblance whatever to the *purulent matter* you have seen.

"When genuine vaccine matter is inserted for a healthy subject, a small pimple or rising in the skin only is to be observed on the third or fourth day. This pimple daily enlarges itself until the eighth or ninth day, when it is usual to find a pock as large as the one half of a split pea, and sometimes larger. An inflammation now takes place about the pock, and occupies a surface as broad as a dollar, and sometimes extending to some distance over the arm. *The centre of a genuine kine pock, is always observed to be depressed below its edges,* which are con-

siderably elevated above the level of the skin. The inflammation, after three or four days continuance, disappears, and if the arm has not been injured by scratching or bruising it, *the pock will soon dry without effusing any of its invaluable matter*—and in a few days more *terminate in a clean, smooth, hard crust, of a black or brown colour.* This crust at first adheres very close to the arm, but gradually detaching itself, it generally falls off about the twentieth day, though sometimes it remains on much longer.

"This is the regular progress and termination of the genuine kine pock, and is the best criterion perhaps that can ever be discovered to ascertain with any degree of certainty, whether the security wished for has been afforded by it against the small pox.

"No ulcer or sore, discharging matter of any kind, ought ever to be depended on, even though it was known that such ulcer or sore arm, followed after the insertion of the most genuine vaccine matter. *In every case of this kind, vaccination ought to be repeated.*

"It is very unfortunate that persons entirely ignorant of the subject, and who cannot distinguish a vaccine vesicle from a common sore, should so often undertake the business of inoculation, without any instruction, and often without knowing whether the matter they are using is vaccine matter or not. The frequent mistakes made by inoculators of this description, have been attended with such fatal consequences, as have put an entire stop to the use of the kine pock in many places."

Copy of Circular Letter, addressed to the several Members of the Fifteenth Congress of the United States, dated

SIR, *Baltimore, 23d March, 1812.*

I hope you will excuse the liberty I take, to inclose you the copy of a plan which I have devised, to detect any mistake which may be hereafter made in vaccination, and to render this practice more universal in the United States. Herewith, also, you will find enclosed some genuine vaccine matter, which it is my wish you should dispose of in any useful manner that may not be inconvenient to yourself.

The natural small pox is now taking a wide range through this and the adjacent states, and many thousand lives may be reasonably expected to fall a sacrifice to it during this spring and the ensuing summer, unless those who are liable to take it, can be generally persuaded to adopt the use of the kine pock—a remedy which, however inscrutable may be its operation, ought certainly to be considered by a grateful people, as the wonderful *Dei Donum*, which if duly appreciated and not abused, has power to rescue the human race from the most destructive pestilence which has ever afflicted them.

I have the honor to be,
with great respect,
your obedient servant,
JAMES SMITH.

A NEW METHOD

Of Conducting Vaccination, by Dr. Smith.

Individuals or families residing in any part of the United States, who cannot otherwise procure the most satisfactory proof of their having obtained the genuine kine pock, are hereby informed; that if, after submitting themselves to be vaccinated, they will take care of the scabs or crusts which every operation, will produce (whether the same may have been effectual, spurious, or imperfect) and will send them to the subscriber *for examination*, they may obtain the same evidence of their safety, or continued liability to take the small pox, as if they had been personally visited by him every day during the whole process of their vaccination. This evidence, it is believed, will be found highly important, not only to those who may be discovered to be still liable to take the small pox, *notwithstanding their supposed vaccination;* but also to many others, who, although secure, might nevertheless perhaps suffer much distress from their own continued uncertainty or apprehension of danger. To obtain this desirable proof of personal safety, however, some little care and attention is requisite on the part of the patient—during the period of inflammation or soreness, the arm into which the infection may have been inserted, should be taken as much care of as possible. The pock, or sore, should not be injured or disturbed by applications of any kind; neither should it be scratched, bruised, or rubbed, in any manner whatever: but the disease should be suffered to come to its own natural termination—*a scab or crust will then be formed which will be found on a strict and proper examination, to be perfectly indicative of the disease that produced it; whether the same*

may have been the genuine kine pock, or any of these spurious affections, which have been so often mistaken for it. As soon as the scabs or crusts become loose they should be taken off and wrapped in a little fine lint or cotton; they may be then folded up in a small piece of clean white paper, on which must be written the name, age, and place of residence, of the person or persons from whom they were taken; and also the time when they came off. In all cases thus submitted, where the vaccination has been effectual, a certificate signed by the subscriber will be given, declaring that the person who has been the subject of it will never thereafter be liable to take the small pox: and if any vaccination may be found to have been spurious, imperfect, or ineffectual, the necessary precautions to be taken, will be particularly and promptly given *in a letter of advice.*

In almost every place where the practice of vaccination has been yet introduced, it must be acknowledged, that many mistakes have been made by those who have undertaken it—many valuable lives it is well known have been lost by these mistakes; and however simple and easy this practice may be, it is by no means probable, that it will ever be conducted. universally, with so much care and judgment, as to avoid all the errors to which it is liable. The force of these observations will appear more evident, when it is better known; *that no dependance whatever, ought to be placed on any operation; whether the same may have been performed, by the subscriber or any other person, or with the best matter,* IF THE ONE ONLY TRUE AND PERFECT VACCINE PROCESS, HAS NOT BEEN REGULARLY PRODUCED BY IT. In every case, where any individual may have doubts remaining as to his safety, after any previous vaccination, the operation ought to be repeated with the best matter to be

procured. An infallible test of security may be thus always obtained with a little trouble, without recurring to the hazardous experiment of using variolous matter.

The subscriber further gives notice, *that he will put up the genuine vaccine matter at this institution, in a convenient and proper manner, for the use of physicians and others, and forward the same to any place required.* The manner in which it can be put up, will admit of its being safely sent to any part of the world Doctor Edward Jenner, the illustrious discoverer of this remedy, has used in England, with the most perfect success, vaccine matter put up in Baltimore, by the subscriber, expressly for this experiment. This invaluable matter has also been successfully transmitted from this institution, to the East Indies; and it is daily forwarded to different parts of the United States, with as good effect to the most distant, as to the nearest place where it is wanted. Directions how to use the vaccine matter, suited to the capacity of any intelligent person, will be forwarded with it when required.

In submitting this plan to the public, the subscriber deems it necessary to state, that he has adventured to propose it, only after the most mature investigation of its merits.* His *experience during eleven years* nearly past, will now, he believes, fully justify him in declaring, that *there is no possible deception or mistake in vaccination, let the operation be performed by whom, when, or where it may, which he will not be able to detect with*

* *The correctness of Dr. Smith's method of conducting vaccination having been lately denied by Dr. Nathaniel Potter, professor of the theory and practice of medicine, in the university of Maryland. Dr. Smith has offered to examine for him any number of genuine vaccine crusts, from one to one thousand, to decide who is right and who wrong. Dr. Potter's letter will be inserted in the next number of this work.*

the utmost certainty, by the examination proposed. He solicits however, the most strict scrutiny into the utility of his plan, by a discerning public, and should it fail to accomplish the highly important objects proposed by him, no one will be more free to acknowledge it, nor yet more deeply to lament it than himself.

JAMES SMITH.

Vaccine Institution, Baltimore 17th March, 1812.

SMALL POX

In the town of Tarborough, in North Carolina.

A NUMBER of papers relating to the unfortunate introduction of the small pox into the town of Tarborough, in North Carolina are on hand.

The whole difficulty which has occurred, has finally resolved itself into the fact, that the true small pox matter was sent by Dr. James Smith, to Dr. John F. Ward, a resident physician in Tarborough, by mistake, instead of the genuine vaccine matter, as intended.

This matter was forwarded by mail, about the beginning of November. Dr. Ward's letter, acknowledging the receipt of it, bears date 29th of December, 1821, in Bertie county, some distance from Tarborough.

Dr. Ward does not state when he first commenced using this matter, but in his letter to Dr. Smith he informs "that the VACCINE MATTER received, had a very different effect upon those he vaccinated, than could have been expected. Twelve out of fifteen, in whose cases the matter was used, he states, had a crop of pustules." The disease produced by this matter, did not prove fatal to any of the persons inoculated with it; but

the contagion produced by these operations, was soon communicated to others, and proved fatal to a considerable number of persons who had not been vaccinated.

In his letter to Dr. Smith, Dr. Ward advises, that "although he had never seen a case of variolous disease, he was under the necessity of stating to his friends, that he believed this to be a disease of the kind." And he concludes by asking Dr. Smith "to give him what information he could on the subject."

Dr. Smith's reply to Dr. Ward, seems to have been written on the instant he received the above information, viz: on the 10th January, 1822. He begs Dr. Ward "to continue to investigate the nature of the disease which had been produced by the vaccine matter he sent, and to communicate with him again on the subject, as soon as possible."

A few days after this, viz: on the 14th January, Dr. Smith (fearing that Dr. Ward might possibly be still absent from home,) wrote to Dr. Hunter, to engage him to investigate the business, and to state to him more particularly the several points on which he wanted information.

Dr. Smith writes to Dr. Hunter, that "he was fearful lest the persons from whom he procured this matter might possibly have had their systems infected with the contagion of small pox previous to their vaccination. He urges Dr. Hunter therefore, to investigate the whole business *promptly*, while the first cases that had occurred could be most easily examined."

Dr. Ward had unhappily omitted to give any description of the packet of matter he had been using; so that Dr. Smith had no reason to suspect he had sent him any other than a packet of vaccine matter, of the same parcel out of which he had sent to Dr. Hunter, and many others in North Carolina.

The public are much indebted to Dr. Hunter, who first discovered the nature of the mistake that had been made; or at least he furnished Dr. Smith with such information respecting the packet of matter that had been sent on there, as enabled him at once to unravel the whole mystery. and to account satisfactorily for every difficulty that has presented itself.

Dr. Smith had fortunately marked the paper which contained the matter he sent to Dr. Ward, with the word "*Variol:*" (the latin term contracted) that signifies small pox. To this he also added his own private mark, ⊡ which he uses for "*perfect crust,*" or scab. He also wrote on it the name of the person "Whitfield" from whom he took these scabs, and the time, ("4th Oct. 1821,") when he got them.

By accident, this paper (after having been kept nearly a month by Dr. Smith) became mislaid; and by some fatal mischance it was folded with some papers that were enclosed to Dr. Ward, and sent to him instead of a packet of vaccine matter, as was intended.

If Dr. Ward had been at all conversant with either the kine pock or small pox scabs, he could not have failed to have detected this mistake, and to have certainly prevented all the injury that has happened. A small pox scab differs as much from a vaccine crust, as a grain of rye does from a grain of wheat, or a potatoe from a turnip. No moral guilt however, should attach to Dr. Ward, in consequence of his being deceived. Neither can any good or charitable person, we presume, entertain the thought for a moment, that either Dr. Ward or Dr. Smith would wantonly destroy the lives of their fellow creatures to their own certain injury, and without the possibility of any good to themselves or others.

THE Speaker presented the following letter from Dr. James Smith, vaccine agent, which was referred to a select committee,* and ordered to be printed.

Baltimore, 4th Feb. 1822.

The Honorable the Speaker
of the House of Representatives.

SIR: From letters which I have received from Dr. Hunter, of Tarborough, in North Carolina, I am fully persuaded I have discovered the true cause of the deplorable events which have happened there; and I am now satisfied, that they have originated from an accident such as never occurred before, and there is no danger that the like will ever occur again.

I had a paper which contained some small pox scabs, taken by myself from a person named Whitfield, about 4th October, 1821; and on this paper I had written carefully, to avoid accidents, that it contained the variolous or small pox matter. But this paper was afterwards mislaid, and, after searching for it in vain, I had concluded it was lost, and supposed it might have been swept out of my office.

From the information, however, which I have received from Dr. Hunter, quoting the words I had written on it, I have no doubt but that the same identical paper I had lost, containing the small pox scabs, and marked as such, was put up in Dr. Ward's letter by some mistake or inadvertence, instead of the glasses of vaccine matter which I intended to send to him, and which, from his letter to me, I supposed he had received and used.

We may now, therefore, safely conclude, that the injury done is of more limited extent than I feared; and every citizen of North Carolina has it in his power to be secured from it, if they will use the vaccine matter I have sent to them.

Dr. Hunter assures me that the vaccine matter obtained by him from this institution, and which he was using when he wrote me, 19th ultimo, was such as he "knew to be genuine."

I hope you will be so good as to make the contents of this letter known in the house of representatives; and I will be happy to furnish you or any committee of congress who may be appointed to make inquiry on this subject, with every fact relating to it which has or may hereafter come to my knowledge.

I have the honor to be, with great respect, your most ob't servant,

JAMES SMITH.

* Their report will be inserted in the next number of this work.

DR CYRUS. CARPENTER.

THE

VACCINE INQUIRER;

OR,

MISCELLANEOUS COLLECTIONS

Relative to Vaccination.

BY A SOCIETY OF PHYSICIANS.

5809 Heist

No. II.

AN INQUIRY

Into the Causes and Effects of the Variolæ Vaccinæ, a disease discovered in some of the western counties of England—particularly Gloucestershire, and known by the name of the Cow Pox. By EDWARD JENNER, *M. D. F. R. S.*

(Continued from Page 15, No. I.)

CASE XVI.

SARAH NELMES, a dairy-maid at a farmer's near this place, was infected with the cow pox from her master's cows, in May, 1796. She received the infection on a part of the hand which had been previously in a slight degree injured by a scratch, from a thorn. A large pustulous sore, and the usual symptoms accompanying the disease, were produced in consequence. The pustule was as expressive of the true character of the cow pox, as it commonly appears upon the hand. Two small pus-

tules arose also on the wrists, from the application of the virus, to some minute abrasions of the cuticle,) but the livid tint, if they ever had any, was not conspicuous at the time I saw the patient.

CASE XVII.

THE more accurately to observe the progress of the infection, I selected a healthy boy, about eight years old, for the purpose of inoculation for the cow pox. The matter was taken from a sore on the hand of a dairy-maid,* who was infected by her master's cows, and it was inserted on the 14th of May, 1796, into the arm of the boy, by means of two superficial incisions, barely penetrating the cutis, each about half an inch long.

On the seventh day he complained of uneasiness in the axilla, and on the ninth he became a little chilly, lost his appetite, and had a slight head-ache. During the whole of this day he was perceptibly indisposed, and spent the night with some degree of restlessness, but on the day following he was perfectly well.

The appearance of the incisions in their progress to a state of maturation, were much the same as when produced in a similar manner, by variolous matter. The only difference which I perceived, was in the state of the limpid fluid arising from the action of the virus, which assumed rather a darker hue, and in that of the efflorescence spreading round the incisions, which had more of an erysipelatous look than we commonly perceive when variolous matter has been made use of in the same manner; but the whole died away (leaving on the inoculated parts, scabs and subsequent eschars,) without giving me or my patient the least trouble.

* From the sore on the hand of Sarah Nelmes—See preceding case.

In order to ascertain whether the boy, after feeling so slight an affection from the cow pox on the system, was secured from the contagion of the small pox, he was inoculated the 1st of July following, with variolous matter immediately taken from a pustule. Several slight punctures and incisions were made on both his arms, and the matter was carefully inserted, but no disease followed. The same appearances were observable on the arms as we commonly see when a patient has had variolous matter applied, after having either the cow pox or the small pox. Several months afterwards, he was again inoculated with variolous matter immediately taken from a pustule, but no sensible effect was produced on the constitution.

Here my researches were interrupted till the spring of the year 1798, when from the wetness of the early part of the season, many of the farmers' horses in this neighbourhood were affected with sore heels, in consequence of which the cow pox broke out among several of our dairies, which afforded me an opportunity of making further observations upon this curious disease.

A mare, the property of a person who keeps a dairy in a neighbouring parish, began to have sore heels the latter end of the month of February, 1798, which were occasionally washed by the servant men of the farm. Thomas Virgoe, William Whevret, and William Haynes, who in consequence, became affected with sores in their hands, followed by inflamed lymphatic glands in the arms and axilla, shiverings, succeeded by heat and lassitude, and general pains in the limbs. A single paroxysm terminated the disease, for within twenty four hours they were free from general indispositions, nothing remaining but the sores on their hands. Haynes and Virgoe, who had gone through the small pox from

inoculation, described their feelings as very similar to those which affected them on sickening with that malady. Whevret never had had the small pox. Haynes was daily employed as one of the milkers at the farm, and the disease began to shew itself among the cows about ten days after he first assisted in washing the mare's heels.

Their nipples became sore in the usual way, with blueish pustules; but as remedies were early applied, they did not ulcerate to any extent.

CASE XVIII.

John Baker, a child of five years old, was inoculated March 16, 1798, with matter taken from a pustule on the hand of Thomas Virgoe, one of the servants who had been infected from the mare's heels. He became ill on the 6th day, with symptoms similar to those excited by cow pox matter. On the eighth day he was free from indisposition.

There was some variation in the appearance of the pustule on the arm. Although it somewhat resembled a small pox pustule, yet its similitude was not so conspicuous as when excited by matter from the nipple of the cow, or when the matter has passed from thence through the medium of the human subject.

This experiment was made to ascertain the progress and subsequent effects of the disease when thus propagated. We have seen that the virus from the horse, when it proves infectious to the human subject, is not to be relied upon as rendering the system secure from variolous infection, but that the matter produced by it upon the nipple of the cow is perfectly so. Whether its passage from the horse, through the human constitution, as in the present instance, will produce a similar effect,

remains to be decided. This would now have been effected, but the boy was rendered unfit for inoculation, from having felt the effects of a contagious fever in a work-house, soon after this experiment was made.

CASE XIX.

William Summers, a child of five years and an half old, was inoculated the same day with Baker, with matter taken from the nipples of one of the infected cows at the farm alluded to in page 51. He became indisposed on the sixth day, vomited once, and felt the usual slight symptoms till the 8th day, when he appeared perfectly well. The progress of the pustule formed by the infection of the virus, was similar to that noticed in case 17, with this exception, its being free from the livid tint observed in that instance.

CASE XX.

From William Summers, the disease was transferred to William Read, a boy of eight years old, who was inoculated March 28th. On the 6th day he complained of pain in the axilla, and on the seventh was affected with the common symptoms of a patient sickening with the small-pox from inoculation, which did not terminate till the third day after the seizure. So perfect was the similarity to the variolous fever, that I was induced to examine the skin, conceiving there might have been some eruptions, but none appeared. The efflorescent blush around the part punctured in the boy's arm, was truly characteristic of that which appears on variolous inoculation.

CASE XXI.

April fifth. Several children and adults were inoculated from the arm of William Read. The greater part of them sickened on the sixth day, and were well on the seventh; but in three of the number a secondary indisposition arose, in consequence of an extensive erysipelatous inflammation, which appeared on the inoculated arm. It seemed to arise from the state of the pustule, which spread out, accompanied with some degree of pain, to about half the diameter of a sixpence. One of these patients was an infant of half a year old. By the application of mercurial ointment to the inflamed parts, (a treatment recommended under similar circumstances in the inoculated small-pox) the complaint subsided without giving much trouble.

Hannah Excell, an healthy girl of seven years old, and one of the patients above mentioned, received the infection from the insertion of the virus under the cuticle of the arm in three distinct parts. The pustules which arose in consequence, so much resembled, on the twelfth day, those appearing from the insertion of variolous matter, that an experienced inoculator would scarcely have discovered a shade of difference at that period. Experience now tells me, that almost the only variation which follows, consists in the pustulous fluids remaining limpid nearly to the time of its total disappearance; and not, as in the direct small pox, becoming purulent.

CASE XXII.

From the arm of this girl matter was taken, and inserted, April 12th, into the arms of

John Marclove, one year and a half old,
Robert F. Jenner, eleven months old,
Mary Pead, five years old, and
Mary James, six years old.

Among these, Robert F. Jenner did not receive the infection; the arms of the other three inflamed properly, and began to affect the system in the usual manner; but being under some apprehensions, from the preceding cases, that a troublesome erysipelas might arise, I determined on making an experiment, with the view of cutting off its source. Accordingly, after the patients had felt an indisposition of about twelve hours, I applied in two of these cases out of the three, on the vesicle formed by the virus, a little mild caustic, composed of equal parts of quick-lime and soap, and suffered it to remain on the part six hours.* It seemed to give the children but little uneasiness, and effectually answered my intention in preventing the appearance of erysipelas. Indeed, it seemed to do more; for in half an hour after its application, the indisposition of the children ceased.† These precautions were perhaps unnecessary, as the arm of the child, Mary Pead, which was suffered to take its course, scabbed quickly, without any erysipelas.

CASE XXIII.

From this child's arm matter was taken, and transferred to that of J. Barge, a boy of seven years old. He sickened on the eighth day, went through the disease with the usual slight symptoms, and without any inflammation on the arm beyond the common efflores-

* Perhaps a few touches with the lapsis septicus would have proved equally efficacious.

† What effect would a similar treatment produce in inoculation for the small-pox?

cence surrounding the pustule, and appearance so often seen in inoculated small pox.

After the many fruitless attempts to give the small pox to those who had had the cow pox, it did not appear necessary. nor was it convenient to me to inoculate the whole of those who had been the subjects of these late trials; yet I thought it right to see the effects of variolous matter on some of them, particularly William Summers, the first of these patients who had been infected with matter taken from the cow. He was therefore inoculated with matter from a fresh pustule, but as in the preceding cases, the system did not feel the effects of it in the smallest degree. I had an opportunity also of having this boy and William Pead inoculated by my nephew, Mr. Henry Jenner, whose report to me is as follows: "I have inoculated Pead and Barge, two of the boys whom you lately infected with the cow pox. On the second day the incisions were inflamed, and there was a pale inflammatory stain around them. On the third day these appearances were still increasing, and their arms itched considerably. On the fourth day the inflammation was evidently subsiding, and on the sixth it was scarcely perceptible. No symptom of indisposition followed.

"To convince myself that the variolous matter made use of was in a perfect state, I at the same time inoculated a patient with some of it, who never had gone through the cow pox, and it produced the small pox in the usual regular manner."

These experiments afforded me much satisfaction; they proved that the matter, in passing from one human subject to another, through five gradations, lost none of its original properties; J. Barge being the fifth who received

the infection successively from William Summers, the boy to whom it was communicated from the cow.

I shall conclude this inquiry with some general observations on the subject, and on some others, which are interwoven with it.

(To be continued.)

SMALL POX.

Importation and Introduction of the Small Pox into the City of Baltimore, from Liverpool.

(*From the Federal Gazette of Oct.* 2, 1821.)

To the Editor of the Federal Gazette.

Sir,

The following notice and circular was sent yesterday to the physicians of this city generally. Should any further supplies of matter be wanted by those to whom it has been sent, or by any other practitioner, whose name may have escaped my recollection, they are all respectfully invited to apply at my office; where genuine vaccine matter has been always kept in the greatest abundance; and may be had at any time, by those who wish to use it.

There are some persons, perhaps, who may be alarmed at the *distressing fact* which I have mentioned in the postscript to my circular, but it would be criminal to conceal for a moment, or deny any occurrence which is so highly interesting to the public. It is true, that for more than twenty years past, I have always maintained a firm belief, that it was impossible for any one to take the small pox after perfect vaccination; but I have now

changed my opinion, as to the impossibility of this occurrence, and know that such a thing has actually happened. Some may probably suppose, that I may be mistaken on this occasion; but I have a history of this child's vaccination on my own books; and she was afterwards, the summer following, fully exposed to the natural contagion of the small pox, and was then found to be perfectly secure from it. What then has reproduced her liability to this plague?

Can it be doubted, whether the disease now affecting *Ann Maria Miles*, be really the true small pox? I at first (before the eruption came out) flattered myself, that her complaint was a disease of this kind; but every symptom and appearance now proves, that she will be covered with the small pox. I hope the medical faculty will visit her, attend to the progress of her disease, and judge for themselves.

I do not wish to be considered any further an alarmist on this occasion, than to *excite attention* to the subject of this communication. NEITHER DO I THINK THAT THIS CASE, NOR A THOUSAND SUCH, SHOULD OVERTURN OUR CONFIDENCE IN VACCINATION. I am still of opinion, that the small pox may be eradicated by the use of the kine pock; but it becomes the public to view this remedy with a less careless eye than has been heretofore apparent.

In England, the greatest confusion, in regard to vaccination, has been lately introduced among the people. The most skilful have been greatly perplexed; and while they have been labouring zealously to serve the cause of humanity, the most ignorant practitioners have taken advantage of their difficulties, and have attempted to re-establish the old inoculation. Many have fallen victims there to these proceedings, and to the same source we

may trace the cause of the calamity which now threatens us.

I am sincerely,

Your obedient servant,

JAMES SMITH.

Baltimore, Oct. 1, 1821.

PUBLIC NOTICE.

Baltimore, September 28, 1821.

On the 14th of August last, the ship Pallas, Captain Ottis, arrived at this port, after a passage of fifty-nine days from Liverpool.

About the first week in July, being then at sea, John Campble sickened on board this ship, and had the small pox slightly. From Campble this disease was communicated to another of the passengers, John Tomkins, who sickened about the third or fourth week of the same month. He had the small pox in a mild, distinct form, and recovered. From Tomkins the contagion was communication to a child of the same name, to Henry James Purviance, aged about seven years, and to William Thompson, one of the seamen on board the ship. These all sickened a day or two before the Pallas arrived. Thompson was sent immediately to the hospital, supposed to be infected with the prevailing malignant fever. He died of the small pox on the 29th of August.

Tomkins' family removed to the Western Country on leaving the ship, taking their infected child with them, and several others, who were still liable to take the small pox. They have not been heard of since they left Baltimore; but it is more than probable, they will communicate the contagion to others on their way.

Mrs. Purviance took a room in Cowpen Alley, near to North Street, over the cooper's shop of Mr. May, and

removed to it immediately after her arrival, with her son. A physician was sent for, but pronouncing the child's disease to be the chicken pox, no further medical attention was paid to it.

From this child the small pox was communicated to his sister Hannah, aged about ten years, and also to one of Mr. May's apprentice boys, who worked in the shop below. Both of these children have recovered.

From May's apprentice boy the contagion was suffered to be communicated naturally to a servant girl who lived in the neighbourhood with Mr. Winwood, and also to Jacob Whitfield, a journeyman cooper, who works at May's shop.

Mr. Winwood's servant girl sickened on the 17th inst. and was removed immediately to Green Street, in Old Town, near to Pitt Street. Whitfield took sick on Tuesday the 18th inst. and now lays ill at his own house in Mulberry Street, a few doors west from Paca Street, where he may be seen, covered with a full crop of perfect and distinct small pox.

The first intimation which has led to a disclosure of these facts, was made to the writer of this note yesterday by accident. They have since, however, been inquired into carefully, and are now hastily stated to attract the immediate attention of the friends of vaccination to duties which are very easy, but highly interesting to humanity. S.

Circular to the practising Physicians of Baltimore.

Baltimore, September 30, 1821.

Sir,

I take the liberty to send to your address a charge of fresh vaccine matter, taken from a perfect eighth day kine pock this afternoon.

The above note will show you the necessity of recommending at this time a general resort to vaccination without delay.

If you have the kine pock already in operation, you will please return the inclosed to me; it will in this case be useless to you, but may be put into other hands where it will be wanted.

Should any new case of small pox be derived from the contagion, which has been imported, and which I have traced to its origin in England, (where this disease was prevailing when the Pallas sailed,)you will confer a great benefit on the public, if you would let it be known immediately.

No good can possibly arise from the concealment of any case of this contagious disease in a populous city. But it may be truly said that much evil may arise from neglecting to give it publicity.

If not attended with too much trouble to you, you would greatly oblige me, and facilitate the distribution of the vaccine matter, if you would send to me through the medium of the Post Office, or by any other conveyance convenient, any of the vaccine crusts, which may be formed under your care, and which you have no occasion to use.

Believe me to be, respectfully,

Your obedient servant,

JAMES SMITH.

P. S. *Sunday Morning, September* 30. Another case of natural small pox has occurred in Cowpen alley, and one in North street, near to Wagon alley. The case in Cowpen alley is attended with the truly distressing fact, that she was vaccinated while an infant at the breast, 25th July, 1810, and has a good mark of the

kine pock on her arm. This fact should not discourage the use of the kine pock, but rather excite greater attention to it.

(From the Federal Gazette of Oct. 6, 1821.)

HEALTH OFFICE.

Baltimore, Oct. 4, 1821.

I deem it my duty to lay before the public, some account of the small pox. This communication has been delayed several days, in consequence of my having a long report to make to the Board of Health, upon a subject of more importance, than that of small pox at the present time. Comparatively, so few persons are now liable to small pox, that, there is little cause for alarm at its appearance. It is only necessary for parents, or masters promptly to do their duty, in getting all persons vaccinated, who have not had the small pox. It is evident, that small pox cannot become much extended, without the most unreasonable neglect.

The Board of Health, published a death from small pox, on the 29th day of August, and on the 14th day of September, they stated that measures had been taken, at the Hospital, to prevent the extension of the disease. They therefore, felt a strong assurance, that the disease would not disturb the city. Thompson, who died at the Hospital, had but little knowledge of our language, and the only information which I could collect from him, and others, was, that the children who had the disease, on board the Pallas, had gone to the western country—this however, was only in part true. And the day after the

Board had assured the public, that Thompson could not have spread the disease in the city, they were informed that cases of small pox, existed in Cowpen alley. The Mayor, Board of Health, and myself visited the family of Mrs. Purviance, where we found two children, convalescent after small pox.

Some relief was afforded this afflicted family; and all persons in the neighborhood were informed, that I would vaccinate all applicants gratis. After much difficulty in search of infection, I procured a scab from Dr. Diffenderffer, with which I vaccinated four children.—These were, an infant son of Mrs. Miles', one other little boy in the same house, a boy at Mr. Kummer's, and the oldest son of Mrs. Purviance, who had not taken the small pox. Of these four, the boy at Kummer's, only took the disease. Not having any hopes of getting fresh matter, and being unwilling to risk waiting till I could obtain infection at Kummer's, I vaccinated a second time the two children at Mrs. Miles', with the same scab; and fortunately, her little son took the disease in both arms. So soon as infection could be obtained of the boy at Kummer's, in a fluid state, I obtained a small portion, and vaccinated the other child at Mrs. Miles', successfully. Thus, it appears, that I succeeded in saving three out of four, from the small pox, and the fourth has not taken any disease. These cases enabled me to supply several gentlemen of my acquaintance, with fresh infection.

When I first visited this neighbourhood, there was a man working in a cooper's shop, adjoining the house in which the small pox was, who had not had the disease; he was advised strongly to be vaccinated, but neglected to have it done. He sickened at his dwelling in Mulberry-street, where Dr. H. Bond and Dr. Amos made

an effort to prevent the spreading of the disease, in which they will no doubt succeed. A servant girl of Mr. Winwood's, was vaccinated by Dr. Winwood, but the operation failing, she was attacked with the small pox.

The small pox did not long escape the notice of the Board of Health, and they left nothing undone, in order to arrest the disease; they did not, however, imagine that a newspaper publication would arrest its progress; they preferred laying the axe to the root. Every effort was made to arouse all persons in the neighbourhood of the disease, to avoid the small pox by the proper prevention.

On Monday last, I called at the house of Mrs. Miles, and found two of her children in bed; a girl and the little boy which I last vaccinated. On my walking towards the bed, she observed that her little boy had the small pox; I replied, I hope not; she said, Dr. —— had said it had the disease, and pointing to the girl, said, she (the girl) had the small pox after having been vaccinated several years ago. The poor girl was thickly covered with the small pox, but of the distinct kind. I now examined the little boy, found a kine pock on each arm; but his little face, arms, breast, &c. full of fiery pimples, accompanied with high fever. On examining the arms carefully, I had no hesitation in telling her that the pimples, which no doubt were small pox, would never advance to maturity, that she need not be under the smallest apprehension of danger to the child, that the misfortune attending her daughter must be the result of want of skill or some neglect.

That this girl must have had the spurious disease, there can be no doubt; the case of the little boy is a strong one in favour of the preventive power of the vac-

cine disease, which may be added to the many thousands which have been recorded, setting the thing beyond all doubt, that vaccination affords as much security against small pox as innoculation itself. And the case of the girl must be placed with those numerous cases of spurious disease which happened to Dr. Jenner and many others in the early part of their practice, and which will always be likely at times to happen where practitioners vaccinate by *proxy*, or where they undertake to know the disease by the scab, or by any other means than that of examining every case at least three or four times themselves. To conclude then, I have vaccine infection which may be depended upon, which physicians can have, and think nothing but neglect can serve to extend the small pox.—And, have never had greater evidence of the preventive properties of the kine pox than during the present season. The little boy of whom I have just been speaking, most clearly had both diseases in his system at the same time, but the kine pock having invaded the system before the small pox, completely subdued its operation. One day's delay would, in all probability, have proved fatal in this case, as the small pox, had there been such delay, must have had the ascendancy.

HORATIO G. JAMESON.

Consulting Physician to the Board of Health.

To the Editor of the Federal Gazette.

Sir,

In a communication from Dr. James Smith, in your paper of the 2d instant, I observe it stated that certain passengers in the ship Pallas from Liverpool, to Baltimore, had been infected with small pox, both during

their passage, and on their arrival, (on the 14th Aug.) Lest the introduction of this formidable disease should be attributed to any want of a due performance of duty on my part, acting as Health Officer to the Port of Baltimore, I beg leave through you, to make the following statement:

I boarded the ship Pallas on her arrival near the quarantine ground, and upon making the necessary inquiries of the captain, relative to the health of his crew and passengers, he informed me that they were all well on board, and had been so from the time of their departure from England. I had all hands mustered on deck, when each separately passed in review before me, and their appearance seemed to confirm the captain's report: the ship was consequently permitted to proceed to town.

It must be evident that the persons suffering under small pox, were detained below *during* this examination, or that the eruption was not perceptible at that time. For the concealment of the previous existence of the disease from the health officer, there can be no apology, being contrary to a positive ordinance in the quarantine system, providing against so dangerous a deception.

T. HAMILTON,
D. H. Officer.

(From the Federal Gazette of Oct. 11, 1821.)

To the Editor of the Federal Gazette.

Sir,

I have read with surprise, a column in your paper of Saturday last, signed "H. G. Jameson, *consulting physician of the Board of Health,*" in which it appears to be the intention of the writer, to condemn me for an-

nouncing "in the newspapers," the late importation and introduction of the small pox into this city. It appears further to be his object to exonerate himself from the censure which has been thrown upon him by the public, for neglecting to have announced this event sooner; and he makes use of the occasion, to give it as his opinion, that I am not competent to judge of the vaccination of one of my own patients; or to distinguish the true from the spurious kine pock.

Heretofore I believed, and I always considered myself fully justified in giving it as my opinion, that *it was impossible for any person to take the small pox after perfect vaccination.* But if I have been obliged to change this opinion and to adopt a different belief, I do not know why Dr. J. should on this account deny the correctness of my statements, or attack me in the ungracious manner he has adopted in your columns. I have the right, and I have deemed it to be my duty, to state my present conviction candidly to the public. I have accompanied this conviction with a fair statement of the case itself, on which it is founded, and have called the attention of the faculty to it, while they could have an opportunity to investigate it fully and fairly. And as soon as the case terminates, it is my wish, that the public should be furnished with every particular respecting it. I can only at this time repeat, what I said in my first communication, that "*I do not think this case or a thousand such should overturn our confidence in vaccination; and that I am still of opinion, the small pox may be eradicated by the general use of the kine pock.*"

I cannot discern in this open course of proceeding, any good reason whatever, why I should be so unfortunate, as to have excited the ire of the "consulting phy-

sician of the Board of Health," to whom I made no allusion whatever in my communication. I was not informed, before I read his attack upon my proceedings, that he had any concern with the cases of small pox, to which I called the attention of the public.

That the small pox was imported, and has lately been introduced into this city, is not denied. But now when Dr. J. can no longer conceal the fact, he excuses himself for not having announced it sooner, by declaring that "it was *his intention* to have laid before the public some account of the small pox; but his communication had been delayed several days in consequence of his having a *long report* to make to the Board of Health, on a subject of more importance, than that of the small pox at this time."

"The small pox," Dr. J. informs us, "did not long escape the notice of the Board of Health; and he adds, "that on the day after he assured the public that Thompson (who had died in the Hospital) could not spread the disease in the city, he received information that a case of small pox existed in Cowpen alley; whereupon he immediately, with the Mayor and Board of Health, visited the infected family, and left nothing undone to arrest the disease."

Until thus apprised by Dr. J. himself, I did not know that the people in Cowpen Alley had been so highly honoured, or that this infected place had been taken notice of *so long ago* as the 15th *of September*. But when I have acknowledged this visit, it will be seen presently, that I have admitted nearly the whole truth, which this statement contains. I deny that the most proper measures were taken to arrest the disease, and will prove in the sequel, that comparatively speaking, there

was nothing done which ought to have been done upon this occasion.

"After much difficulty in search of vaccine matter, Dr. J. informs the public, a scab was procured from Dr. Diffenderffer, with which he vaccinated four children, one of whom only took the disease; but not having any hopes of getting fresh matter, he used the same scab a second time, (four or five days afterwards) and another of the children who were exposed took the kine pock under his care."

It is true indeed, that Dr. J. might have spent much time in search of vaccine matter; and contended in vain with many difficulties to procure it. But inasmuch as he omitted *intentionally* to apply at the only source, where he had any good reason to expect that fresh infection could be procured, he merits no indulgence whatever from the public on this account. This excuse, however, coming from Dr. J. has much in it which is highly censurable, if not criminal. It is well known to him, that a legal provision has been made for the preservation of the vaccine remedy in my hands. But he never applied for it, and he deserves in my opinion to be punished severely, for deceiving those, who were exposed to so much injury by his unfounded declarations, that "there was no fresh vaccine matter to be had in this city." This remedy has always been kept fresh by me, as is my duty, and Dr. J. could have obtained it from me, at any time he might have chosen to apply for it. It must have been to suit his own convenience or profit, that Dr. J. kept the people in the neighbourhood of Cowpen alley exposed to the small pox so long, that several of them have suffered severely thereby—two have died, and our whole city have been unavoidably disturbed. If Dr. J. as was his especial duty, had given timely and pro-

per notice, that the small pox did really exist in the city, all the mischief and alarm which has occurred, I believe, might have been prevented.

"When I first visited the infected neighbourhood, says Dr. J. there was a man working at a cooper's shop adjacent, who was strongly advised to be vaccinated; but he neglected to have it done, and afterwards sickened at his house in Mulberry street," where "every effort was made to arouse all persons in the neighbourhood of the disease, to avoid the small pox by the proper preventive;" and Dr. J. declares to the public in his report, that "these efforts will no doubt succeed." The public will be able to judge how far this statement is entitled to their consideration, when they are informed, that the man alluded to (Mr. Whitfield) took the small pox on the 18th September last; and that when I afterwards heard of his illness, and went to see him on the 28th September, nearly two weeks after Dr. J.'s famous visit to Cowpen alley, I found that *Mr. Whitfield's own child had been kept all the time exposed to the small pox in the same room with him, and that it had not been vaccinated.* One abortive attempt, it is true, had been made to save it, but its parents were afterwards induced to believe, that "there was no good vaccine matter to be had," and nothing was done further for the child. I explained to Mrs. W. immediately the danger which threatened her child, but told her I hoped it might yet be saved; she was thankful for my interference, and at my own request allowed me to vaccinate it for her. The operation succeeded in both arms, and although this child, at the age of eleven months, had been exposed seven days to the influence of the contagion, (its father being then in the tenth day of his disease,) it has been saved from the small pox. The escape

which this child has thus made, is so worthy of notice, that I have begged its parents to let it be called VACCINA WHITFIELD; and they have promised to indulge me in this request, for they have seen that it is indebted to the kine pock for its life.

Besides this child, I found a number of others in the same neighbourhood, who were exposed to great danger. *Not one of them had been vaccinated from the 18th to the 28th September.* I found one family in which there were two children exposed to the contagion, within one hundred yards from Whitfield's house, who had not heard of the small pox being near them. There was another child, in the house adjoining to Mr. Whitfield's, who was likewise exposed to great danger. All these children I have vaccinated successfully—not for any profit or gain to myself, as has been ungenerously insinuated—but gratuitously, and for the express purpose of arresting the progress of the small pox. Dr. J.'s assertions, therefore, respecting the successful efforts that were made in this infected neighbourhood, have no foundation whatever, except in the report which he has communicated to the public.

In the case of Mrs. Miles' little boy, who was vaccinated by Dr. J. about the 20th Sept. (if I can judge correctly from the appearance of the pock on his arm.) the doctor observes "that one day's delay in the operation would, in all probability have proved fatal to him." But if he is really sensible of the truth of his own remark, how can Dr. J. excuse himself, or justify his apparent self-complacency, in rescuing "four children" only from the danger impending over them; when there were so many others left exposed in the same neighbourhood to lose their lives by his neglect.

It is in vain that Dr. J. has attempted to excuse himself, by asserting that *"so few persons are now liable to the small pox, there is little cause for alarm at its appearance."*—As a proof of the fallacy of this declaration, I will only state that in the course of two hours on Friday evening, the 21st Sept. without knowing at the time that there were any in danger of the small pox, I inserted the vaccine matter gratuitously for the following persons, all of whom lived so near to Cowpen alley, that any one of them might have taken the disease which existed there. Many others have been vaccinated by me in the same neighbourhood, and many more are yet liable to suffer in the same infected district. I copy the names from my book in the order in which I found and vaccinated them, at their own houses on the evening above mentioned. *Z. Magill, aged three months; Matilda, six years; Richard Trip, four years; Cassandra Trip, two years; Harrison, five years; Sophia Williams, twenty-five years; Dinah Trip, twenty-four years; Lloyd, one year; Jacob —— two years; Sally Rollings, two years; Margaret Rollings—; Geo. Watts, fourteen months; Ann Flings, seven months; John Flings, five years; Samuel Scott, eighteen months; Fanny Barclay, two years; Mary Eisenrings, two years; Mary Barclay, ten years; Elizabeth Barclay, eight years; Theresa McGurk, two months; and George Prout* These poor people, with but few exceptions, all took the kine pock from my operations at that time, and yet Dr. J. would have the public believe that there are but very few persons in Baltimore liable to take the small pox.

I have been in the practice for many years past of searching for fit subjects and vaccinating them, to keep up a regular and uninterrupted supply of fresh vaccine matter. And if I could afford to devote more of my

time to the service of the poor, in this way, I could find, I have reason to believe, one hundred patients every week for the whole year round, so general has been the neglect of vaccination in this city. The public may be assured, therefore, that if the small pox should be suffered from our neglect to become epidemic among us, we will find it to be a much more distressing and fatal calamity to the poor of this city, than the yellow fever has been—but the evil of such an event would not be confined to ourselves. The small pox is *really a contagious disease*, and if it spread here we will soon unavoidably export it to every part of this state, and perhaps to every commercial town, whether inland or seaport, with which we have any connection, and in all these places it may be expected to produce the same shocking scenes of distress as among ourselves. To lay "the axe at the root of this evil" *effectually*, I prepared a circular letter as soon as I discovered that the small pox had been imported and introduced into this city, and sent some fresh vaccine matter to the physicians whose names are annexed, soliciting them to aid me to extend the use of it, as generally and expeditiously as lies in their power, and I believe that their efforts, supported by a kind Providence, will save our people from the danger yet impending over us.

I remain your

Obedient and humble sev't,

JAMES SMITH.

Allender, Alexander, Baker, Birckhead, T. E. Bond, H. Bond, Brevett, Brown, Chatard, Coulter, Cromwell, W. H. Clendinen, A. Clendinen, Davidge, De Butts, Dunan, Diffenderffer, Donaldson, Dunkel, Fisher, Gillingham, Hall, Hamilton, Handy, Hentzie, Howard,

Harper, Jameson, Jennings, McDowell, Macaulay, McKenzie, Martin, Owen, Potter, Page, Pue, Pattison, Reese, Revere, Roberts, Readel, Sinnot, Warfield, Walch, White, Zollickoffer, and all others whose names escaped my recollection at the instant, have been since invited to call on me for vaccine matter.

(From the Morning Chronicle, Oct. 24, 1821.)

To the Editor of the Morning Chronicle.

Sir,

The danger to be apprehended from the late introduction of the small pox into this city, continues to increase. Five new cases have occurred this month; all of them can be traced to the contagion derived from *Cowpen alley*, where, as has been shown, this plague was kept concealed from the public, from the middle of August last; about which time *it was imported* in the ship Pallas, from Liverpool.

The following are all the cases of small pox, derived from this importation, which have yet come to my knowledge.

1. Thompson, sickened on board the Pallas, about the 14th August, and was removed to the Hospital, where he died on the 29th August.

2. Mrs. Purviance's son, sickened on board the Pallas, about the 14th August, and was brought immediately into the city, to a small room in Cowpen Alley, over Mr. May's cooper shop.

3. Mr. May's apprentice boy, sickened in Cowpen alley about the 1st September—*recovered.*

4. Mr. Winwood's servant girl, sickened in Cowpen alley, about the 17th September, and was removed to Green street, Old Town—*recovered.*

5. Mr. Whitfield, a journeyman cooper, at May's shop, in Cowpen alley, sickened on the 18th September; removed to Mulberry street, near to Paca street—*recovered.*

6. Mr. Starr's child, took the contagion from its father, who worked in May's shop. This child sickened about the 27th September, and died under the most malignant form of small pox, about the 5th day of its illness.

7. Mr. Graybel's servant man, sickened in Market street about the 27th September, and died about the 9th day of his disease.

8. Mr. Sheckle's son, sickened on the 6th October, lays in Old Town near to the corner of North and High streets.

9. Mrs. Goddard's negro girl, sickened about 12th October, and lays in Saratoga street, opposite to the Dispensary.

10. Mr. Law's servant girl, sickened about the 12th October, and lays at Mr. Law's, corner of Eutaw and Saratoga streets—dangerously ill.

11. Mr. Atkinson's child, sickened about the 15th October, and lays in Potter street, Old Town—dangerously ill.

12. Mrs. Holston's child, sickened about the 17th October, and lays in Strawberry alley—dangerously ill.

It is hoped the friends of vaccination will not relax in their efforts, but yet strive to prevent this loathsome disease from becoming a general one, among the poorer classes of our citizens. We should bring to mind on this occasion, how easy it is to extinguish a fire at first, and how difficult after a little delay.

I must beg, that the public will not look on the few cases of small pox, which have occurred with too much indifference, or flatter themselves, that it will be in our power very easily to subdue this contagion. Every new case that occurs, multiplies the danger of its spreading—and we have already great reason to fear, that Baltimore will soon become the exporter of this contagion to the country around us in every direction.

JAMES SMITH.

Note presented to the Mayor previous to his call of the Faculty of Medicine.

To the Honorable the Mayor and City Council of Baltimore.

GENTLEMEN,

The rapidity with which the natural small pox is spreading in this city, with the unexampled difficulties which have lately presented themselves in regard to vaccination—render it proper that you should be apprised of them.

Any fact relative thereto which has come to my knowledge will be most cheerfully communicated to you at any time, if wanted.

But much more interesting information on this subject I have reason to believe, might be obtained by you from others of the faculty of medicine, if they were applied to.

Most respectfully,

Your obedient servant,

JAMES SMITH.

Pleasant street, 5th Dec. 1821.

Meeting of Physicians at the Mayor's Office.

At a meeting of the Medical Faculty of Baltimore, held on Monday, the 10th instant, at four o'clock, P. M. in the Chamber of the First Branch of the City Council, in pursuance of an invitation by the Mayor, to devise and suggest the most efficient means of extinguishing the Small Pox within the limits of the city, Doctor Solomon Birckhead was called to the chair, and Doctor John D. Readel appointed Secretary; when, after mature deliberation, the following resolutions were unanimously passed:

1. Resolved, That is the opinion of this meeting, that vaccination is the best security from small pox.

2. Resolved, That a committee, consisting of Drs. James Smith, William Donaldson, George Frick, Samuel K. Jennings, and Mr Granville Sharp Pattison, be appointed to prepare an address to the public, in conformity with the above resolution.

3. Resolved, That a committee, consisting of Drs. Jennings, Macaulay, Gillingham, Clendenin and Handy, be appointed to consider and report to the Mayor, the most efficient general means, which, in their opinion, ought to be adopted for a speedy extermination of the small pox in the city of Baltimore.

JOHN D. READEL, M. D. Sec.

TO THE PUBLIC.

The Committee appointed to prepare an address to the public, in conformity to the above resolution, direct their attention to the subject with that earnestness and zeal which the importance of the matter requires. They

are aware of the alarm that pervades the public mind on the subject of the small pox, (lately imported into this city) from the supposed failure of the vaccine remedy to arrest its progress and eventually to exterminate it from our city and country.

The committee allow the occurrence of the small pox in a few instances, after *perfect vaccination.** They conceive that it is not an *infallible* and *positive* preventive of that loathsome disease, *but they are satisfied the security afforded by vaccination is equal to that offered by inoculation.* In support of this opinion, the committee would call the attention of the public to the late report of the Royal Vaccine Institution, from which it appears that out of 67,000 patients vaccinated, only *eight* cases of small pox had afterwards occurred.

That the great majority of persons vaccinated are secured from an attack of small pox, the experience of practitioners, both in Europe and the United States, abundantly proves. That the committee are, from authentic record and personal observation, led to believe this fact. That their own experiments, though not multiplied to a great extent, furnish them with proof of the prophylactic power of the kine pock. That the few cases of small pox occurring after perfect vaccination, can be referred to some susceptibility which cannot be removed, even by inoculation of the small pox.—That the vaccine in the present condition of society, presents greater advantages than the inoculation of small pox did in the last century; for although the natural small pox was

**Baltimore, 2d April,* 1822.

I have reason *now* to dissent from this opinion; and do not believe that the *true* or *pure* small pox ever occurs after *perfect* vaccination. Further explanations will be given hereafter.

JAMES SMITH.

divested, by its adoption, of a great part of its danger, yet, in a great many instances, under the best management and most favorable circumstances. it proved fatal. If then this mode of practice was adopted by the good sense of mankind, why now reject a *sufficient preventive* unattended with danger, not painful in its effects, and morally certain in its result? If any means could be devised for a time, however short, to remove so dreadful a scourge, should it not, by the good sense of the community be adopted?—The kine pock is not only capable of effecting this object, but is fitted to meet this pestilence, however secret in its operation and subtile in its approach. Numerous instances have occurred within a few weeks, wherein this inestimable preventive has secured the subject from the ravages of the variolous pestilence But the virtues of the vaccine are not confined to a solitary benefit. It excites no disorder in the constitution by its operation. It is not contagious through the medium of the atmosphere—It is never fatal. It produces no consequent diseases in the human system. It admits of being used in the most infirm and valetudinary. It can be resorted to in any season of the year. It requires no preparation to insure its success, nor diminish its violence, for, *indeed*, it has no hurtful properties.

Compare it now with the inoculated small pox. This disease is at best, uncertain in its result. It may be said to be always dangerous, for you cannot predict whether it will be mild or malignant. It excites great constitutional derangement, even when not fatal. It is contagious by diffusion in the atmosphere and personal contact. It is fatal at the most liberal calculation in one out of three hundred instances; and when the small pox is received through the atmosphere in the natural way,

it destroys one out of every seven persons attacked by it. It gives rise to other disorders, as scrophula in its worst and most various forms, consumption and diseases of the skin. It requires a particular season of the year for its employment, being more dangerous when used in warm than in cold weather. It requires regimen, confinement, and the use of medicines It interrupts for a time, the labors of the industrious and active citizen. It requires, for a successful result, a good constitution and the absence of unhealthy dispositions of body. In every possible way in which it can be received, it is a dangerous, loathsome and fatal disease. Fully impressed with the importance of a speedy and general resort to the invaluable substitute offered by vaccination, the committee conclude with a hope, that the prejudices and ingratitude of man will not throw away with disdain from his service, what reason, science, benevolence and philanthrophy entreat him to accept.

JAMES SMITH,
WM. DONALDSON,
GRANVILLE S. PATTISON,
GEORGE FRICK,
SAMUEL K. JENNINGS.

Dec. 11*th*, 1821.

TO JOHN MONTGOMERY, Esq.

Mayor of the City of Baltimore.

The Committee appointed by a resolution passed at the meeting of the Physicians, held at the Council Chambers, on Monday, the 10th instant, to report for the consideration of the Mayor, the most effectual means of eradicating the small pox from the city, have met, and

after mature deliberation have thought it advisable to propose the following measures, as the most conducive, in their opinion, to effect this desirable object:

1st. That the city be divided into *six* districts, and suitable persons appointed for each district to vaccinate all those who have not received the vaccine disease, or concerning whose security there is any doubt.

2d. That a person or persons be appointed for each district, whose duty it shall be, under the direction of the physician appointed to vaccinate, to seek out all cases among the poor, and immediately report the same for vaccination.

3. That all such infected persons as the city can conveniently remove, be instantly on the appearance of the small pox, taken to an hospital, organized under the direction of the civil authority, as a small pox hospital, or to the city hospital and alms house, if those institutions can receive them.

4th. That the Commissioners of health lose no time in attending to the ventillation and purification of all houses in which the small pox may have existed.

5th. That all persons so vaccinated, in whom the disease shall have proved genuine, shall be provided with a printed certificate, and that each physician appointed, keep a list of the names and ages of the persons so furnished.

All which is respectfully submitted.

(Signed) SAMUEL K. JENNINGS,
P. MACAULAY,
EZRA GILLINGHAM,
WM. H. CLENDENIN,
W. W. HANDY.

Letter from Dr. Smith to Dr. R. H. Archer, dated

BALTIMORE, 13*th Jan.* 1822.

DEAR SIR,

IN the spring of 1801, it seems you inoculated an infant here, named Effee M'Clellan, who was born on the 8th Dec. 1800; the daughter of Mr. Robert M'Clellan, of this city. This child I am informed was considered by you as properly inoculated for the true small pox; and I have no koubt of the fact, as she has yet a good mark on her arm, and many pitts from this operation on her person. But I wish you to bring the circumstances attending the inoculation of this child as properly to your recollection as you can at this late period of time, and communicate to me any fact relative thereto, that you can be certain of. Mr. M'Clellan informs me, that he always was particular in having his children inoculated while they were at the breast, and that the operation was performed for several other of his children by you. His daughter Harriot, was *inoculated*, or *vaccinated* by you, in the spring of 1803. Mr. M'Clellan does not know whether you used in this case the vaccine or variolous matter; but I wish you to be so good as to inform me, as she is now attending on her sister, just out of the small pox, and has been in the same room with her during her whole illness.

Effee M'Clellan, your quondam patient, is now the wife of Mr. John Jeremiah. She was taken sick on the 25th ult. with fever, followed by all the symptoms which usually precede an eruption of the small pox. On the 29th, 30th and 31st Dec. after suffering extremely, an innumerable crop of variolous pustules made their appearance on every part of her face, body, and limbs. Being pregnant and nearly at her full time as she suppo-

ses, Mrs. Jeremiah was seized with the pains of labour in the midst of her fever, and was then happily delivered of her infant at 10 o'clock, A. M. on the 29th Dec. this being the fifth day of her fever and first day of the appearance of the small pox eruptions on her person. On the third instant these eruptions were nearly at maturity, and the fever subsided; on the fourth and fifth (being the eleventh and twelfth days of her disease) the eruptions formed into small crusts, and some few of them were taken off. On the sixth, seventh and eighth instant, these crusts came off generally, and Mrs. J. recovered her usual health again; her skin being left covered with red spots, which are wearing off very fast, and it is doubtful whether any pitts will be left from the eruptions which produced them.

This is one of those cases to which the new name of *varioloid* has been given; I have viewed it as more interesting, inasmuch as I hope to be able to get from you a satisfactory account of her previous inoculation for the small pox; which will aid us to balance accounts with the enemies of vaccination, who think one or two pimples sufficient to condemn the kine pock, and oblige mankind to recur again to inoculation for the small pox. On the fourth and fifth days of her disease, Mrs. Jeremiah was considered by the physicians who attended her as in great danger of losing her life. High fever, delirium, vomiting and excessive pain in the head, back, and limbs, were the most distressing symptoms which characterised the effects of the variolous contagion in this case.

Mr. Jeremiah's infant was vaccinated on Sunday evening, 30th Dec. at six o'clock, being thirty two hours after its birth. The vaccination took effect and progressed very regularly until Tuesday the 8th instant,

when a few red spots were observed on its person. On the next day, however, when I saw this infant, the spots had assumed the appearance of eruptions, and they are now so exceedingly numerous, that, notwithstanding the early use there was made of the vaccine matter, I fear it will perish under the effect. Some few of the eruptions upon it seems to have dark coloured, depressed spots in their centre, which you know were formerly considered as portending great danger to the patient.*

I shall be anxious until I hear from you in reply to this letter, and beg you will not omit to detail any circumstances you can distinctly recollect in regard to the inoculation of this family, or of others whom you might have inoculated at the same time and with the same infection.

I remain your sincere friend,

JAMES SMITH.

Letter from Dr. Robert H. Archer to Dr. Smith, dated

CHESAPEAKE, *28th Jan.* 1822.

DEAR SIR,

YOUR letter of the 13th instant, did not reach me until three days ago.

I find by reference to my books, that on the seventh day of April, 1801, I inoculated with variolous matter a daughter of Mr. Robert M'Clellan, the person you have described; but have no memorandum of the progress or character of her disease. I cannot however be mistaken in pronouncing that she had the small pox in its genuine form, for on this subject there was no difficulty if the

* Died on Saturday morning 19th January, 1822. This child's case will be given in a future number of the Inquirer.

matter was genuine. I inoculated on the same day and presume with the same matter, a child and three negroes of a widow Gibson, who does not now live in Baltimore, but she is the sister-in-law of Mr. Wm. Gibson, clerk of your county, and two children of Mr. John Jolly, who was at that time a merchant in Baltimore, but I believe lives now in the country. On the 11th of the same month I inoculated a negro of Mr. John Talbot, a taylor, and on the 13th a child of Mr. Alexander Floyd, whose widow was living in Baltimore eighteen months ago, nearly opposite the Union Bank in East street.

All these persons I take for granted were inoculated with the same matter, as there was no difficulty in preserving it in an active state for a long time. I vaccinated a daughter of Mr. Robert M'Clellan. the gentleman above named, on the 15th of April, 1803. At this period I was very attentive to the progress of the disease in all those whom I vaccinated, and was not satisfied unless the pock took on the eighth or tenth day, the regularly circumscribed inflammation, for this was then considered as characteristic of the genuine disease. I state this from general impressions, and I have no doubt this child was considered by me as having had the genuine vaccine.

Any further inquiry on this subject will be answered with pleasure.

I am, &c.

ROBERT H. ARCHER.

Church-street, February 5, 1822.

TO DOCTOR JAMES SMITH.

Dear Sir,

As I perceive you have introduced my opinion on the subject of vaccination into the public prints, I presume any apology for addressing you on the occasion would be superfluous. As you have drawn conclusions that my premises do not authorise, it behoves me to make the refutation co-extensive with the annunciation of my opinion. The differences of opinion between us arises from one of your own tenets, one which I believe you *alone* hold as orthodox. You maintain that there are certain external characteristic marks by which you can decide with certainty upon the prophylactic powers of the vaccine virus. I deny the existence of any such criterion, either viewed separately or collectively with any other phenomena of the disease or its consequences. I do not from my scepticism on this point, deduce any conclusion unfavourable to the utility or excellence of vaccination; and so far am I from justifying the substitution of the small pox, that I have universally inculcated both privately and publicly, the necessity of repeated vaccination, till the system shall have been rendered unsusceptible of the vaccine impression. The belief of the protecting influence of repeated vaccination is predicated upon the notorious fact, that any constitutional impression from the vaccine virus, however slight, invariably mitigates the violence of the small pox, viz. occasions the modified or varioloid disease. From this fact, it follows necessarily, that a stronger impression will destroy the susceptibility of the system to the variolous poison. That

this countervailing influence of repeated vaccination can be permanently impressed, every observant experienced vaccinator, who has practised, can testify. My own experience of the efficacy of the practice, conspires with many other facts, to confirm the opinion, I have so frequently expressed. Since the introduction of vaccination into this city, I have vaccinated 1752 private patients, and when any doubts could be entertained of the genuine disease having been excited, I have invariably re-vaccinated the patient, and sometimes repeated the operation several times. I have moreover always acted cautiously in the selection of the virus, and out of the whole number, I have never, after the strictest inquiry, discovered that any one of them has received either the small pox or the modified disease.

The difference between a denial of the truth of the deceptive physiognomy of the pustule crust, or scar, and a confident belief in the efficacy of the prophylactic virtues of the vaccine virus, are considerations so essentially different, that they cannot be associated in the relation of cause and effect, without violating the most obvious rules of right reason. It must indeed be a well stretched conclusion from my premises to infer, that because no external marks of discrimination are evident to occular demonstration, that we are justified, nay morally bound to terrify, and poison, and perhaps destroy our neighbours, by introducing the small pox. If there has been any criterion discovered, by which we can pronounce a subject completely guaranteed against the invasion of the small pox, from vaccination, it is to be found in that insensibility to the vaccine virus, which is the result of repeated vaccination, till not even a local vaccine inflammation can be excited. This is not the test on which you repose your confidence, but I defy you, or

even Dr. Jenner himself to designate any other. Any information from you or any other person, illustrative of your opinion, will confer an obligation on the faculty, and infinitely gratify, dear sir, yours very respectfully.

NATH'L POTTER.

Vaccine Institution, 11th Feb. 1822.

TO DR. NATHANIEL POTTER,

Professor of the Theory and Practice of Medicine in the University of Maryland.

DEAR SIR,

I have read your letter of the fifth instant attentively, and with no small degree of satisfaction; but I am not sensible that I have been guilty of announcing to the public incorrectly your former opinion relative to vaccination.

Nothing could be more remote from my views than to do you any such injustice. I took the liberty to mention your name, not so much to show that we differed in opinion, as to call forth from you and others, who are so justly distinguished as the Medical luminaries of our day, some rays of light to cheer our fellow citizens, and to make my own path more plain and easy, in the hour of difficulty. which I feared had come upon us. But having discovered the true cause of the deplorable accident that has occurred in North Carolina, my mind is at ease again. The public alarm has in some degree ceased, and I entertain no doubt whatever but every difficulty which may present itself will be certainly overcome.

In your letter before me you declare, that you have "a confident belief in the efficacy of the vaccine virus," and I receive this plain avowal of your opinion with great pleasure. But, to exonerate myself from the suspicion this declaration may possibly excite, that I mistated your opinions as they were heretofore understood, I must beg leave to refer you to page 114 of your Memoir on Contagion, published in this city, in 1818, and in which you say that "mankind can only be protected from the small pox by vaccination confined to the enlightened physician, "ADMITTING THE VACCINE VIRUS TO BE AN EFFECTUAL PROPHYLACTIC, (PREVENTIVE OF SMALL POX) WHICH IS PROBLEMATICAL!"

When you wrote this book (and I value it most highly) you could not most assuredly have entertained "a confident belief in the efficacy of the vaccine virus." I rely, however, upon your own candour entirely, to exempt me from the imputation of mistating your former opinions.

This point being now settled between us, satisfactorily I hope to both parties, let us to the main question on which we differ, as widely as it is possible for any two friends to disagree.

As I stand "*alone*" however, on the ground I have taken, according to your intimation, I cannot consent that our disagreement should be settled upon consultation by a plurality of votes, as you seem to wish. You would in this way, I have no doubt, gain an easy victory over me. My republican principles will most readily admit, that the "voice of the people" should be supreme in politics—but the VOICE OF THE DOCTORS in Physics, is oftentimes as remote from the truth as the North Pole is from the South.

I propose, therefore, that our present differences of opinion shall be settled by sound experience and MATTERS OF FACT only, leaving all theories, speculations, preconceived opinions, prejudices, and particular interests out of the question entirely. If you will enter the lists with me on these terms, we will stand before the public on equal grounds—if I fall, your victory will be more worthy of notice by those who are most deeply concerned. I will maintain, then, against you, and against *the whole of the Medical Faculty*—(if they may please to join you,) that every perfect vaccine crust, should, of itself, furnish to any vaccinist of skill and experience in this business, a proof sufficient to demonstrate to him whether the person upon whom the said crust was produced, has been perfectly vaccinated or not?

This has been my mode of practice for many years past, and I speak of it with the same confidence that you do of your belief in the efficacy of vaccination. I daily receive these crusts, by letters from all parts of the United States, with the names only of the persons from whom they are taken, attached to them; and I ask no other criterion to enable me to give a correct opinion, whether the individuals concerned are liable to take the small pox or not.

I never inquire about the attendant symptoms; they accompany every perfect vaccine process, as constantly as Jupiter is accompanied by his satellites. Neither do I ask, as some would have the world to believe was of the greatest consequence, whether the operation was performed by an "enlightened physician" or some "ignorant agent." The vaccine process is always the same, whether the virus may be inserted by one or the other.

The vaccine crusts then are with me, as I have always declared to you, the "whole law and the prophets" in this business—they always give a perfect history of every case of vaccination written by the unerring hand of Heaven, a source from whence the TRUTH comes with awful force to silence our presumption, and put to shame all the quackery and vain boasting of our profession.

In your letter before me you state, that "no criterion has yet been discovered by which we can pronounce any subject guaranteed by vaccination against the small pox, except in that insensibility to the vaccine virus, which is the result of repeated vaccination, *till not even a local inflammation can be excited.*" And you defy me or "even Jenner himself to designate any other." But, my dear doctor, if you have no greater confidence in the efficacy of vaccination, than you exhibit in this declaration, I beseech you to pause and consider before you join our ranks—examine well the great importance of this subject, not on our own accounts, but for our country's sake—for the benefit of mankind.

An epidemic small pox, such as now threatens the whole of our country, would require, according to your method of practice, a more numerous corps of enlightened physicians than could be found in the United States, and if they could be got, they would not be employed by our people at the great expence which would be required to maintain them. I do not know who would not rather have the inoculated small pox at once—than suffer such everlasting and uncertain repetitions of vaccination as you propose.

We will consider hereafter, if you please, the advantages and disadvantages of our respective methods of practice. My letter has become unreasonably tedious,

but in the mean time, as I wish every difficulty in this business to be decided by fair experiment, you may put my principles to the test at once. I have often explained my method to you; but I will now examine for you any number of perfect vaccine crusts, from one to one thousand. If I fail to give a correct opinion on any case (and you may expose the persons concerned to the small pox immediately, on my responsibility for their safety,) I will yield the palm to you and acknowledge that you are right and I am wrong.

Believe me to be, dear sir, yours most respectfully.

JAMES SMITH.

Report in Congress Relative to Vaccination.

Agreed to in the House of Representatives of the United States on Friday, Feb. 22d.

The Committee to whom was referred the resolution of the sixth instant, directing them to inquire whether it be necessary to make any modification of the law passed in the year 1813, entitled "An act to encourage Vaccination," have had the same under consideration, and report:

That the committee have not deemed it necessary to report the various reflections which have presented themselves upon the subject of vaccination, but feel a confidence in the belief, that the opinion heretofore entertained of its being a preventive of the small pox is well founded, and believe it one of the greatest benefits bestowed upon the country, and one which ought to be cherished by every citizen of the republic.

They are aware that a disease, called by medical gentlemen varioloid, has, within a few years past, made its appearance in Europe; that it much resembles the small pox; and, under similar circumstances, has been as fatal as that disease ever was; none are exempt from its influence, neither those who have had the small pox, nor yet those who have been exposed to the influence of the vaccine; but it is gratifying to find that the weight of authority seems to favor a belief, that all those exposed to the infection of the latter suffer much less than any others.

The committee have seen, with pain and regret, the occurrences which have lately transpired in the state of North Carolina, where the physicians in that part of the country believed the small pox to exist. These occurrences were of such a character as to claim their attention, particularly as the United States' vaccine agent, appointed pursuant to the provisions of the act referred to in the resolution, seemed to create a doubt as to the efficacy of vaccine in the prevention of small pox, and left the impression equivocal, whether it was not his belief that it was the varioloid disease in North Carolina, produced by some change in the vaccine matter whilst on its way to a physician in that state to whom he had sent it, or whether it had not assumed that character from the circumstance of the small pox epidemic in the neighborhood from whence it was sent. They have forborne to remark upon that transaction, as the vaccine agent has since ascertained, and acknowledged, that it was the genuine small pox matter he had sent to North Carolina, through his own mistake, which at once relieves the fears of those who doubt the efficacy of the cow pox, if there are any such; and dissipated the mist which

hung over the subject, in the opinion of all who did not doubt.

It is proper to remark, that the disease called varioloid seems to partake more of the character of small pox than of vaccine, and that there is no fact, within the scope of their inquiry, to induce the committee to believe that vaccine ever has degenerated into varioloid. It is unquestionably true, that instances have occurred where persons have taken the small pox, after having the vaccine, though such instances are as uncommon as it is for persons to take the small pox a second time.

The tranquility of settled belief has been disturbed by allusions to the difficulty of securing the continuance of genuine matter, though no doubt is entertained by your committee that proper attention will overcome every obstacle of that kind, eradicate every evil, and, finally, triumph over prejudice itself. Some reproach may have been brought upon vaccination, not, however, the result of any well-founded doubt as to its efficacy; but from the ignorance or carelessness of those who have used it, as it is well known that many benevolent persons throughout the community have taken upon themselves to vaccinate their friends and others, and, doubtless have done much good; but if, in the progress of time, by want of care, the matter shall have become spurious, there is not adequate experience to detect the change, and, consequently, some risk of exposing the person to small pox, thereby bringing danger to the sufferer, and unjust reproach to the cow pox. This kind of inoculation, done by every individual who feels charitably inclined, if with care, is not disapproved of; though they are decidedly of opinion, that it would be much better to trust it to the judgment and care of the medical gentlemen of the country.

The Committee have deemed it not irrelevant to state a few prominent facts in regard to the effects of these diseases in different countries, which will more clearly shew the progress of opinion, and the advantages of vaccination. In the first place, it is proper to state, that there is authority for estimating the deaths in the natural small pox at one in six; and, though a more intimate knowledge of that malady, together with any benefit arising from inoculation, may have put it more in the power of physicians to control it, yet, in Great Britain, where vaccination is less attended to than in some other European countries, fifty thousand persons are annually destroyed by it. But, even there, by vaccination, all agree the waste of human life has been lessened. It not only secures the person from the small pox, but greatly lessens the danger to be apprehended from the varioloid disease, as may be seen by reference to highly respectable authority, which states that, at Millau, in France, containing about eight thousand inhabitants, two hundred vaccinated persons took the varioloid disease, and every one recovered, whilst two hundred persons who had not been vaccinated were destroyed.

In Denmark, by the care which the government has taken to cause the people to vaccinate, the small pox no longer exists. This remedy was introduced into that country about the year 1800, by laws which were vigilantly enforced. By these laws it was ordered that no person should be received at confirmation, admitted to any school, bound apprentice to any trade, or married, who had not been vaccinated, unless they had undergone the small pox. A just idea may be formed of the benefits which have resulted to Denmark—a country where the preservation of human life is more the object of governmental care and solicitude than almost any

other—when it is known that the city of Copenhagen alone, during the twelve years preceding the introduction of the vaccine, lost by the small pox five thousand five hundred of its inhabitants. In the year 1805, not one death occurred in the whole Danish dominions from the small pox. Prussia has made many wise regulations favorable to vaccination, which have produced highly beneficial results Formerly, the small pox was believed to destroy forty thousand persons annually in that kingdom. In 1817, by this mild and entirely safe remedy, the deaths were reduced to two thousand nine hundred and forty, so that the proportion of deaths from small pox to those from other causes, had been reduced from *one* in *seven* down to one in one hundred and four.

It is believed that the principality of Anspach, in Bavaria, containing a population of 236,406 individuals, lost five hundred annually in 1797, 1798, and 1799; and in the year 1800 there perished 1609 persons of that disease; but, so clear and distinct have been the effects of vaccination, that, from the year 1809 to the year 1819, only five cases have occurred. and not one death.

In France, prizes are given to the surgeons who have annually vaccinated the greatest number of persons.

In Lombardy, in the year 1808, in Milan and Geneva, vaccination was believed to have extirpated the small pox.

If the statements of intelligent travellers ought to be taken as evidence upon a subject of this kind, there can be no doubt that vaccination has operated the same beneficial effects in South America which it has done in Europe; and the journals of our own country bear testimony to its great and increasing good throughout the republic.

The Committee have viewed, with attention and concern, the promulgation of opinions tending to lessen the just confidence of the community in the efficacy of vaccination, from the circumstance of there being present slight affections of the skin, ulceration, or vascular disease. They will not undertake to decide what may be the effect of diseases of this character upon the result of vaccination, when they have affected the constitution of the individual, but think it doing no violence to the opinions of those who have adopted such, to consider them as a class distinct from the mass of the community. They are inclined to believe that the constitution of the individual vaccinated, with other causes, may vary the appearance of the disease in some degree, but not to change its character; to do that, there would be partial causes, easily detected and easily understood.

The Committee, from all the reflection which they have been able to bestow upon the subject, are of opinion that no modification of the law is necessary, as its provisions put it amply in the power of those entrusted with the execution of it to punish abuses whenever any exist. They therefore recommend the adoption of the following resolution:

Resolved, That the Committee be discharged from the further consideration of the subject referred to them by the resolution of the sixth instant.

Small Pox in Easton.

We, the physicians of Easton, being called on by the commissioners of the town to make report on the subject of small pox, beg leave to state, that the contagion of that disease was brought from Baltimore, some time in

December last, and broke out in a black family, living on Mr. John Edmondson's farm within two miles of Easton, towards the last of that month, but the first case being not very severe, it was not considered of that character, until three other cases took place, when two or three of the physicians were called on to visit the family, who pronounced the four cases to be the genuine small pox! A general alarm was immediately excited in the town and its vicinity, when vaccination was resorted to, more especially by that class of people, who never think of guarding against danger, until it is near at hand! It is probable, this terrible disease would here have stopped, if a coloured child in the suburbs of the town had not been exposed to its contagion by its mother having frequently visited this black family. It has now been several weeks since this coloured child has been dead, and we are confident that the Small Pox has not, since this fatal case, appeared near the town or in the country, neither is there any reason to suppose that it will appear, unless it should be again brought from Baltimore, as the commissioners have taken effectual measures to prevent its spreading from any other source.

The physicians feel much gratification in having it in their power on this occasion to bear testimony to, and to proclaim to the public their entire confidence in the efficacy of vaccination as a preventive against the contagion of small pox. In the two families just mentioned the contagion has been carried in the clothes of the mothers of the children. In the first instance, the mother who had been vaccinated eighteen years ago, went to Baltimore in December last, and without a doubt on our minds, brought the contagion from that city in her clothes, and communicated the contagion to her

youngest child, who had the disease about the last of December. This child, unquestionably communicated it to the three others, all of whom recovered, while the mother who had been vaccinated eighteen, and the two children ten years ago, remained perfectly secure and well. In the other family, the father and mother had been vaccinated some eight or ten years ago, and the two children during the alarm, which had been created from the black family on Mr. Edmondson's farm, the youngest an infant at the breast, received the vaccine disease, but the eldest unfortunately did not take it and thus became liable to the contagion of small pox, brought in the clothes of the mother, and its death was the consequence. If such facts as these will not remove every shadow of doubt as to the preventive effects of vaccination against small pox contagion, what will? If there is a man incredulous after this plain unvarnished tale, demonstration is a thing of nothing, and doubts and difficulties will be forever arising in his mind! We might go further and contrast the efficacy of vaccination with inoculation as a preventive against small pox contagion, and the experience of some of us would be found to be *altogether in favour of vaccination*, having known more than one instance of patients having had the small pox a second time, but *never having known small pox to succeed genuine vaccination*.

Could the people every where be properly impressed with the necessity and importance of general vaccination, they could not, nay ought not to hesitate in taking effectual methods to spread the blessings of vaccination, and to prevent the evils of small pox. Those who are not able to pay physicians ought to know, that we are never unwilling to perform acts of humanity without fee

or reward, and we therefore invite them to come forward and be vaccinated gratis.

ENNALLS MARTIN & SON,
ROBERT MOORE,
T. THOMAS & SON.
SAMUEL T. KEMP,
THEODORE DENNY.

Easton, March 29th, 1822.

AN ADDRESS TO MOTHERS.

MARK'D ye its eye of azure blue?
Press'd ye its cheek of roseate hue?
Or—let us say its eyes are black,
With graceful ringlets o'er its neck,
Or hazle brown—or silver grey,
With golden tresses bright as May;
No matter what the shade——'tis fair,
And *worthy* of a mother's care.

And wilt thou through neglect expose
The lovely child to future woes?
Ah no!—then haste on wings of love,
To gain the blessing from above,
That heavenly blessing, sent to cheer
The mother's heart from year to year.
The child will thank a mother's care,
That saved its little face so fair,
While warm caresses from the heart,
Its grateful feelings will impart.

Then do not, I entreat, delay
The *simple* work, from day to day,
O! taste the stream that kindly flows.
Which Nature's bounty still bestows.
From a PURE SPRING* it gushes forth,
Runs East and West, and South and North,
It branches out, through glen and vale,
Proclaiming Nature's "wond'rous tale,"
And *distant isles* its virtues prize,
And mark its course with wond'ring eyes.

And shall the natives of this soil
Refuse indulgent nature's smile?
She points to TRUTH—the unerring way,
Go——follow nature and obey.

* Dr. Smith's Vaccine Institution.

THE

VACCINE INQUIRER;

OR,

MISCELLANEOUS COLLECTIONS

Relative to Vaccination.

BY A SOCIETY OF PHYSICIANS.

No. III.

AN INQUIRY

Into the Causes and Effects of the Variolæ Vaccinæ, a disease discovered in some of the western counties of England—particularly Gloucestershire, and known by the name of the Cow Pox. By EDWARD JENNER, *M. D. F. R. S.*

(Continued from Page 57, No. II.)

ALTHOUGH I presume it may be unnecessary to produce further testimony in support of my assertion "that the cow pox protects the human constitution from the infection of the small pox," yet it affords me considerable satisfaction to say, that lord Somerville, the President of the Board of Agriculture, to whom this paper was shewn by Sir Joseph Banks, has found upon inquiry, that the statements were confirmed by the concurring testimony of Mr. Dolland, a surgeon, who resides in a dairy county, remote from this, in which these observations were made. With respect to the opinion adduced "that the source of the infection is a peculiar morbid matter, arising in the horse," although I have not been able to prove it from actual experiments conducted immediately under my own eye, yet the evidence I have adduced appears sufficient to establish it.

They who are not in the habit of conducting experiments may not be aware of the coincidence of circumstances necessary for their being managed so as to prove perfectly decisive; nor how often *men* engaged in professional pursuits, are liable to interruptions, which disappoint them almost at the instant of their being accomplished; however, I feel no room for hesitation respecting the common origin of the disease, being well convinced that it never appears among the cows, (except it can be traced to a cow introduced among the general herd, which has been previously infected, or to an infected servant,) unless they have been milked by some one who, at the same time, has the care of a horse affected with diseased heels.

The spring of the year 1797, which I intended particularly to have devoted to the completion of this investigation, proved from its dryness, remarkably adverse to my wishes; for it frequently happens while the farmer's horses are exposed to the cold rains which fall at that season, that their heels become diseased, and no cow pox then appeared in the neighbourhood.

The active quality of the virus from the horse's heels is greatly increased after it has acted on the nipples of the cow, as it rarely happens that the horse affects his dresser with sores, and as rarely that a milk-maid escapes the infection when she milks infected cows. It is most active at the commencement of the disease, even before it has acquired a pus-like appearance; indeed I am not confident whether this property in the matter does not entirely cease as soon as it is secreted in the form of pus. I am induced to think it does cease, and that it is the thin darkish looking fluid only, oozing from the newly formed cracks in the heels, similar to what sometimes appears from erysipelatous blisters.

which gives the disease. Nor am I certain that the nipples of the cows are, at all times, in a state to receive the infection. The appearance of the disease in the spring, and the early part of the summer, when they are disposed to be affected with spontaneous eruptions so much more frequently than at other seasons, induces me to think, that the virus from the horse must be received upon them when they are in this state, in order to produce effects: experiments, however, must determine these points. But it is clear, that when the cow pox virus is once generated, that the cows cannot resist the contagion, in whatever state their nipples may chance to be, if they are milked with an infected hand.

Whether the matter, either from the cow or the horse, will affect the sound skin of the human body, I cannot positively determine; probably it will not, unless on those parts where the cuticle is extremely thin, as on the lips for example. I have known an instance of a poor girl who produced an ulceration on her lip, by frequently holding her finger to her mouth, to cool the raging of a cow pox sore, by blowing upon it. The hands of the farmer's servants here, from the nature of their employments, are constantly exposed to those injuries which occasion abrasions of the cuticle, to punctures from thorns, and such like accidents; so that they are always in a state to feel the consequences of exposure to infectious matter.

It is singular to observe that the cow pox virus, although it renders the constitution unsusceptible of the variolous, should, nevertheless leave it unchanged with respect to its own action. I have already produced an instance* to point out this, and shall now corroborate it with another.

* See Case IX.

Elizabeth Wynne, who had the cow pox in the year 1759, was inoculated with variolous matter, without effect, in the year 1797, and again caught the cow pox in the year 1798. When I saw her, which was on the eighth day after she received the infection, I found her affected with general lassitude, shiverings, alternating with heat, coldness of the extremities, and a quick and irregular pulse. These symptoms were preceded by a pain in the axilla, and on her hand was one large pustulous sore. It is curious also to observe, that the virus, which with respect to its effects is undetermined and uncertain previously to its passing from the horse, through the medium of the cow, should then not only become more active, but should invariably and completely possess those specific properties which induce in the human constitution, symptoms similar to those of the variolous fever, and affect in it that peculiar change which for ever renders it unsusceptible of the variolous contagion.

May it not, then, be reasonably conjectured, that the source of the small pox is morbid matter of a peculiar kind, generated by a disease in the horse, and that accidental circumstances may have again and again arisen, still working new changes upon it, until it has acquired the contagious and malignant form under which we now commonly see it, making its devastations among us; and, from a consideration of the changes which the infectious matter undergoes from producing a disease on the cow, may we not conceive that many contagious diseases, now prevalent among us, may owe their present appearance not to a simple, but to a compound origin? For example, is it difficult to imagine that the measles, the scarlet fever, and the ulcerous sore throat with a spotted skin, have all sprung from the same

source, assuming some variety in their forms, according to the nature of their new combinations? The same question will apply respecting the origin of many other contagious diseases, which bear a strong analogy to each other.

There are certainly more forms than one, without considering the common variation between the confluent and distinct, in which the small pox appears in what is called the natural way. About seven years ago, a species of small pox spread through many of the towns and villages of this part of Gloucestershire: it was of so mild a nature, that a fatal instance was scarcely ever heard of, and consequently so little dreaded by the lower orders of the community, that they scrupled not to hold the same intercourse with each other as if no infectious disease had been present among them. I never saw nor heard of an instance of its being confluent. The most accurate manner, perhaps, in which I can convey an idea of it, is, by saying that had fifty individuals been taken promiscuously, and infected by exposure to this contagion, they would have had as mild and light a disease as if they had been inoculated with variolous matter in the usual way. The harmless manner in which it shewed itself, could not arise from any peculiarity either in the season or the weather, for I watched its progress upwards of a year without perceiving any variation in its general appearance. I consider it then as a *variety* of the small pox.

In some of the preceding cases I have noticed the attention that was paid to the state of the variolous matter previous to the experiment of inserting it into the arms of those who had gone through the cow pox. This I conceived to be of great importance in conducting these experiments, and were it always properly

attended to by those who inoculated for the small pox, it might prevent much subsequent mischief and confusion. With the view of enforcing so necessary a precaution, I shall take the liberty of digressing so far as to point out some unpleasant facts, relative to mismanagement in this particular, which have fallen under my own observation.

A medical gentleman (now no more,) who for many years inoculated in this neighbourhood, frequently preserved the variolous matter intended for his use, on a piece of lint or cotton, which in its fluid state, was put into a vial, corked, and conveyed into a warm pocket; a situation certainly favourable for speedily producing putrefaction in it. In this state (not unfrequently after it had been taken several days from the pustules) it was inserted into the arms of his patients, and brought on inflammation of the incised parts, swellings of the axillary glands, fever, and sometimes eruptions. But what was this disease? Certainly not the small pox; for the matter having, from putrefaction, lost or suffered a derangement in its specific properties, was no longer capable of producing that malady, those who had been inoculated in this manner, being as much subject to the contagion of the small pox, as if they had never been under the influence of this artificial disease; and many, unfortunately, fell victims to it, who thought themselves in perfect security. The same unfortunate circumstance of giving a disease, supposed to be the small pox, with inefficacious variolous matter, having occurred under the direction of some other practitioners within my knowledge, and probably from the same incautious method of securing the variolous matter, I avail myself of this opportunity of mentioning what I conceive to be of great importance; and, as a further cautionary hint, I

shall again digress so far as to add another observation on the subject of inoculation.

Whether it be yet ascertained by experiment, that the quantity of variolous matter inserted into the skin makes any difference with respect to the subsequent mildness or violence of the disease, I know not; but I have the strongest reason for supposing that if either the punctures or incisions be made so deep as to go *through* it, and wound the adipose membrane, that the risk of bringing on a violent disease is greatly increased. I have known an inoculator, whose practice was "to cut deep enough (to use his own expression) to see a bit of fat," and there to lodge the matter. The great number of bad cases, independent of inflammations and abscesses on the arms, and the fatality which attended this practice was almost inconceivable; and I cannot account for it on any other principle than that of the matter being placed in this situation instead of the skin.

It was the practice of another, whom I well remember, to pinch up a small portion of the skin on the arms of his patients and to pass through it a needle, with a thread attached to it previously dipped in variolous matter. The thread was lodged in the perforated part, and consequently left in contact with the cellular membrane. This practice was attended with the same ill success as the former. Although it is very improbable that any one would now inoculate in this rude way by design, yet these observations may tend to place a double guard over the lancet, when infants, whose skins are comparatively so very thin, fall under the care of the inoculator.

A very respectable friend of mine, Dr. Hardwicke, of Sodbury in this county, inoculated great numbers of patients previous to the introduction of the more modern

method by Sutton, and with such success, that a fatal instance occurred as rarely as since that method has been adopted. It was the doctor's practice to make as slight an incision as possible *upon* the skin, and there to lodge a thread saturated with the variolous matter. When his patients became indisposed, agreeably to the custom then prevailing, they were directed to go to bed and were kept moderately warm. Is it not probable then, that the success of the modern practice may depend more upon the method of invariably depositing the virus in or upon the skin, than on the subsequent treatment of the disease?

I do not mean to insinuate that exposure to cool air, and suffering the patient to drink cold water when hot and thirsty, may not moderate the eruptive symptoms and lessen the number of pustules; yet to repeat my former observation, I cannot account for the uninterrupted success, or nearly so, of one practitioner, and the wretched state of the patients under the care of another, where, in both instances, the general treatment did not differ essentially, without conceiving it to arise from the different modes of inserting the matter for the purpose of producing the disease. As it is not the identical matter inserted which is absorbed into the constitution, but that which is, by some peculiar process in the animal economy, generated by it, is it not probable that different parts of the human body may prepare or modify the virus differently? Although the skin, for example, adipose membrane, or mucous membranes are all capable of producing the variolous virus by the stimulus given by the particles originally deposited upon them, yet I am induced to conceive that each of these parts is capable of producing some variation in the qualities of the matter previous to its affecting the constitution.

(To be Continued.)

THE NORTH CAROLINA ACCIDENT.

After the full developement of facts, relative to the late introduction of the small pox into North Carolina, made by Dr. Smith to the Speaker of the House of Representatives, and the lucid report of the first Committee of Congress appointed on this subject, (see Vaccine Enquirer No. 2) it was presumed the public excitement which this accident had occasioned, would have been suffered to subside, and that no further obstruction would be thrown by government in the way of the free and general distribution of the vaccine matter contemplated by the agent of vaccination. But in this reasonable expectation the friends of vaccination have been greatly disappointed; and it is with no small degree of surprise and regret we find that an extreme advantage has been taken of this accident to cut the public off suddenly from the only source generally known to the citizens of the United States, as properly prepared to furnish them with genuine vaccine matter, and directions for its use.

Twelve or fifteen individuals, it seems, were inoculated for the small pox, in North Carolina, by Dr. John F. Ward, with the true variolous matter, instead of "the vaccine matter," as he at first stated he had used. The chief part of those who were inoculated with this variolous matter had the small pox in so mild a form that the true nature of this disease was not suspected at first; and although it did not prove fatal to any of them, others caught the disease from them and died.

The variolous matter with which these persons were inoculated, had been procured by Dr. Smith to prove the efficacy of the vaccine matter he was using, and

which had not been tested by him for two or three years, in consequence of the continued absence of the small pox from the United States: an absence that has been occasioned more by his own exertions, it is believed, than by the exertions of any other individual in our country. But, by some unhappy mistake, the small pox matter that he had procured for *his own use only* was sent by Dr. Smith to Dr. Ward, instead of the packet of vaccine matter he intended; and which he was afterwards induced, by Dr. Ward himself, to believe had been received by him and used.

Dr. Smith had put up the variolous matter first in a piece of newspaper, and afterwards in an envellope that was blank on one side, but printed on the other, being part of a waste copy of obsolete regulations of the vaccine institution, dated January, 1817. On this paper, after folding, Dr. Smith had written, distinctly, that it contained "variolous" matter, and put it away carefully; waiting a proper opportunity to make that good use of it for which he had procured it; and for which the public should feel themselves much indebted, rather than make it any cause of accusation against him.

The vaccine matter is put up for distribution by Dr. Smith, between small plates of glass; but in this case a paper full of perfect small pox scabs, just as they were taken from the person who had this disease, were sent to Dr. Ward. These scabs differ as much in appearance from the vaccine matter, as any one thing can well differ from another to which it bears no resemblance: and it is not yet satisfactorily accounted for, how Dr. Ward came to use these small pox scabs; no directions for their use, or the use of any other matter, were put up with them. The waste paper which contained them

was sent to Dr. Ward in a letter which related entirely to his appointment as an auxiliary agent of the Vaccine Institution. The letter it seems which Dr. Smith sent, or supposed he had sent to Dr. Ward, with the vaccine matter, and directions for its use, has never been acknowledged to have been received by him.

There are many physicians who yet disapprove of vaccination; and they prefer using the small pox matter whenever they can get it; and no one views this conduct as criminal when they honestly and openly declare that which they openly do. Dr. Ward, however, does not inform us that he used the variolous matter from choice; and it is but charitable to admit that he used it ignorantly. But there is no physician, we believe, that understands his business as he should, who would not have known what the paper that was sent to him contained, as soon as he opened it; even although it might not have been labelled as it was. The whole blame, therefore, if any person known in this business, is to be blamed, should attach to Dr. Ward. He acted with his eyes open, and unadvisedly. If he did not know what the paper contained, when he opened it, he ought not to have used it on any account. But how he managed to use it so successfully as he did, not knowing what it was, and having no directions of any kind how it should be used, is really a matter of some astonishment. The obsolete paper in which the matter was folded, might itself, if he had read it, been sufficient to have led him to suspect that some mistake might have been made.

We have regretted, therefore, to find Dr. Ward in his justification, exerting himself in the public prints in North Carolina, to excite prejudices against Dr. Smith, to destroy his invaluable institution; and when he builds

his accusation against Dr. Smith on the paper that contained the small pox matter, as if sent to him intentionally to deceive, we do not know which to condemn most, his ignorance, or his duplicity.

But as consequences to the public of very serious import have already ensued, and as many further injurious effects are likely to follow from this unfortunate accident—all the papers which relate to it shall be published.—In laying these papers before the public we are sorry we shall be obliged to expose to their view, an asperity of prejudice, and spirit of persecution apparently generated by this accident, still prevailing, and aiming at the destruction of Dr. Smith, for no act of misconduct alledged against him, further than the mere accident itself, which he has so fully and satisfactorily accounted for. No good can possibly arise to the public, or to any individual, out of a course of proceeding so unjustifiable among any christian or enlightened people.

Copy of a letter from Dr. John F. Ward, of North Carolina, to Dr. James Smith, of Baltimore, dated

BERTIE COUNTY, December 29th, 1821.

DEAR SIR,

I am sorry to inform you that the vaccine matter you last sent me, had a very different effect upon those I vaccinated, than could have been expected. Twelve out of fifteen on whom I used the matter, had a crop of pustules, and in one instance attended with the most alarming symptoms. My observations were more particularly confined to four cases, all of whom I vaccinated on the same day. Five days after, I saw them.—From

the slow progress the vaccina had made upon their arms I concluded the matter would prove ineffectual—but to my surprise, on the ninth day the pustules commenced filling, with slight inflammation around them. I saw my patients no more until the fourteenth after vaccination; I called at the house, and found one of them (a girl of nine years old) labouring under a violent fever, with a quick pulse and occasional delirium, respiration much hurried upon the least motion, had no pain, her hearing was impaired; was taken with a fever on the twelfth day after vaccination, and had been nearly as I found her ever since, (so stated to me); I administered an emetic, it operated twice as such, but its action on the bowels was more considerable; the general plan of treatment was cooling. Towards the latter part of the third day after the fever commenced, an eruption was discovered about the mouth, quite florid and small; at night the delirium continuing, I applied a blister to the back part of the neck, and directed a dose of rhubarb. The fourth day the symptoms of fever, &c. were not quite so violent; a very large crop of pustules were now visible—on the face there were not less than two thousand; it was quite impracticable to count them. They increased in number for two or more days, when her fever remitted and delirium abated. Her face and body is literally covered with pustules; on the seventh or eighth after the eruption commenced, the pustules were flat, with a dry dark looking centre, and depressed: she is now much inclined to sleep, and difficult to rouze from that state; no small degree of prostration of strength is manifest, the sense of hearing is more perfect.

The second patient, a young man nineteen years old, had not less than two hundred eruptions on his face, had

a slight fever the day the girl was attacked, and continued three days; was not confined to bed. The pustules commenced on him and the girl at the same time; on the seventh or eighth after their commencement, those on the young man were filled with a white fluid—in twelve hours they were changed to a yellow colour, and his face swelled. This patient was not necessarily confined to his bed at any time, &c.

The third, a boy three years old, his health bad before vaccination.—The eruption commenced two or three days later than in the other cases, but he has several hundred pustules on his body, frequently complains of cold fits, as did also the little girl in the early part of her fever: he discharges considerable saliva, has a constant though not very high fever.

The fourth, a young man, had a very few eruptions, not to exceed ten, and no fever.

I procured some vaccine matter supposed to be genuine, and vaccinated in all the families where this suspicious disease had been introduced. Although I had never seen a case of variolous disease, I was under the necessity of stating to my friends that I believed this a case of that kind; indeed, I was compelled to act as though it was the disease, to prevent those susceptible of taking small pox, from visiting the family, should it prove that disease.

Please give me what information you can obtain upon this subject, and if you have any genuine vaccine matter, send it me by the first mail.

It has been ten days since I saw or heard from my patients. Nothing but the indisposition of a patient fifty miles from Tarborough, would have induced me to have left my patient. I will communicate with you again upon this subject.

Please direct your letters containing matter, &c. to Dr. Benjamin Boyken, Tarborough, in my absence.—I have sent you a scab taken from the arm of Etheldred Phillips upon whom I used the matter you sent me, but who had been a subject of vaccination some years before: the progress of the pustule on his arm was slow, like the others, and consequently the scab was obtained on the fifteenth after vaccination from the arm—fifteenth of December was the day that he detached it from the arm, &c.

I remain, yours respectfully,

JNO. F. WARD.

Copy of a letter from Dr. James Smith, of Baltimore, to Dr. John F. Ward, of North Carolina, dated

BALTIMORE, 10th January, 1822.

DEAR SIR,

I have this instant received your very interesting communication of the 29th; for which, please to accept of my thanks. I wish you to continue to investigate the nature of the disease which has been produced by the vaccine matter I sent, and to communicate with me again on this subject. You speak of having obtained some vaccine matter, which you suppose was genuine, from some other source, when you found your patients labouring under an eruptive disease. Will you be so kind as to inform me from whence this matter was derived, and, particularly, whether it was derived from any parcel sent by me, lately, into North Carolina, and when and to whom? I sent some vaccine matter to your

neighbour, Dr Hunter, at the same time, and of the same parcel as that I sent to you, viz. on the 1st November; but I have not heard from him, and would be glad to know whether he used it, and with what effect. We have had the natural small pox prevailing here since August last, and find many anomalous symptoms arising, on which the faculty here have not yet come to any decision, further than their own various speculations on the subject. Persons who have been vaccinated, and others who have had the small pox before, are suffering an attack of the same disease again: but some say it differs from the small pox, and is a new disease, to which they have given the name of varioloid. In Europe, also, they have suffered lately in the same way; and I am sorry to say that I perceive more confusion in all their details than any rational or satisfactory theory of these anomalies. As I sent some of the same kind of matter to fifty or more physicians in North Carolina that I sent to you, it will not be long until I learn the result, and will make you fully acquainted with every fact that may come to my knowledge on this business. In the mean time let me beg of you to keep a history of any facts that may present themselves to you; and be particular to send me all the crusts that are formed in the arms of those you have vaccinated; also, some of the crusts of the eruptions when dry, if they are not lost. Say, also, whether any persons have taken the disease from those you have vaccinated, and give the *dates* of all the symptoms as they have occurred. The crust you enclosed me has no one appearance of a vaccine crust; and I do not know what to make of it.

I enclose you some matter, the same as I am now using here; and also a vaccine crust, the product of my

matter. I shall be very uneasy until I hear from you again. Excuse the inaccuracies of this hasty letter.

Yours, truly,

JAMES SMITH.

Copy of a letter to Dr. Benjamin B. Hunter, of Tarborough, from Dr. James Smith, of Baltimore, dated

BALTIMORE, 14th January, 1822.

DEAR SIR,

I had a letter, a few days since, from Dr. Ward, your neighbour, detailing some unpleasant circumstances relative to vaccination with matter sent to him by me, and of the same kind as that I sent to you, as well as to other physicians in North Carolina, at the same time, viz. about 1st November.

Dr. Ward's history of such important events, is not sufficiently explicit; and he has forwarded no crust to me from any of the persons vaccinated, except from one person, E. Philips, who had previously been a subject of this operation. The Doctor, I fear, may be absent from home, as his letter is dated from Bertie county; would you, therefore, be so good as to make an inquiry for me, or co-operate with Dr. Ward, if he is at home, in this investigation, and inform me of every particular as soon as possible?

1. Give me the name and age of every person vaccinated with the matter sent by me, and the date of each operation.

2. If any of the scabs produced by this matter (the matter sent by me) can be procured, whether from the arm at the place of insertion, or from eruptions on the

surface, let them be carefully preserved, and let a part of the same be sent to me by the first mail convenient. Let the names of each of the persons, and the histories of their cases, accompany their own crusts.

3. If any persons have been vaccinated with any matter taken from those who were infected with the matter sent by me, let me have a history of their cases also, accompanied by crusts from them, to enable me to determine, with more certainty, the nature of the disease which, it seems, has been propagated among you.

4. The time of inserting the matter; the appearance of the pock produced; and the time of the falling of the scabs, whether from the arm, or from eruptions on the body; are the chief facts which I want to know relative to any of the cases of disease among you. These facts, with the crusts themselves, will be sufficient, without any detail of the medical treatment, for our present purpose. Any attendant symptoms, if affixed to the case, with the time of their occurrence, would be satisfactory.

5. If the disease has been communicated by contagion to any person or persons, I would be glad to learn their names, with the time they became diseased, the time of the appearance of eruption, and the time of the falling off of the scabs, with some of the scabs themselves.

My present fears are, that the persons from whom I procured the vaccine matter (although genuine to every appearance) may have had their systems previously affected by the variolous contagion, which has been epidemic here, and which I have found affects many of those who are vaccinated with more or less pimples, or smaller eruptions. Until this present epidemic, we were always free from appearances of this kind, except in solitary or chance cases. But if you will aid me in

this investigation promptly, while the first cases may be fully examined into, I flatter myself we will be able to solve every difficulty, and soon relieve you from such perplexity as I am sorry to find in your vicinity. Please to inform me whether you used the matter, and when, and with what effect.

I enclose you a letter which I have just received from one of my most zealous and scientific correspondents, with the crust from his own child, which is perfectly genuine. I hope you will use it, and let me know the result.

Most respectfully,
Your obedient servant,
JAMES SMITH.

Copy of a letter from Dr. Benj. B. Hunter, of North Carolina, to Dr. James Smith, dated

TARBOROUGH, January 16th, 1822.

Doct. James Smith,

DEAR SIR,

Although I have not the pleasure of a personal acquaintance with you, you will find by adverting to the signature, that I am a practising physician, and a subscriber to the U. S. Vaccine Institution.—The object of this communication, is to inform you that the *matter* which you enclosed to Dr. Ward of this place, some time in the month of November last, in every instance in which it has been used, has produced the genuine *variolous disease.*

As a confirmation of this fact, several cases have occurred not only in town, but in the vicinity, where the

variolous disease has unquestionably been taken in the *natural way.*

At the commencement of this disease, the symptoms were so equivocal as to make it a subject of much doubt as to the existence of the *small pox*, but at present there is no division of opinion.—I have five cases of the *variolous disease* in my own family!!!

In your letter addressed to Dr. Ward, I find this marginal note, "Variol. [illegible] 4th Oct. 1821," and beneath it a word which I supposed to be "*Whitford.*" An explanation of this circumstance, I think is due to yourself and the community, and I hope you will not fail to attend to it by the earliest opportunity.

Yours, respectfully,

BEN. B. HUNTER.

N. B.—Two cases of the disease have been fatal.

Copy of a letter, from the same, to the same, dated

TARBOROUGH, Jan. 19th, 1822.

Doct. James Smith,

DEAR SIR,

I am sorry that I neglected in my letter by last mail, to inform you that the matter which you sent me in November last, was used by me in eight cases without any effect, and it would have escaped my recollection, altogether, but for your last communication to Dr. Ward, in which you mentioned the circumstance of having sent it to me. I ascribed its failure, to the circumstance of its being sent on glass, and perhaps may have been decomposed; whereas Dr. Ward received his in *several scabs.* If that which you sent me, was of the "*same*

parcel," as you have expressed it, in your letter to Dr. Ward, which was forwarded to that gentleman, I feel much gratified in knowing that the matter, from whatever cause it may have happened, *was entirely inert.*

It gives me much pain to inform you that a disease which I suppose to be the *genuine small pox*, is extensively prevailing, not only in ours, but the adjacent counties; every case of which, is easily traced to those families where the disease was propagated from the matter sent to Dr. Ward. But I have much pleasure in informing you that the matter which we are *now using* in a general and extensive vaccination, (and such as I know to be genuine,) is that which I received from the gentleman who presented me with the subscription for the vaccine institution; informing me at the time, that he had received it *from you*, for the purpose of distributing it among his subscribers.

Since the date of my last letter, three fatal cases have occurred, and many more are apprehended!!!

I perceive in your letter to Dr. Ward, that an *eruptive fever* is prevailing in Baltimore, of such an ambiguous nature, as to excite disagreement even among physicians; but in those cases which have occurred here, taken in the natural way, there are no *anomalous symptoms.*

In my next, I will give you a more particular history of the disease which is prevailing here; and hope that you will not fail to inform me of the progress of that which is raging in Baltimore.

There has no case occurred, where any persons have taken it, who have ever been the subject of the *vaccine* or *variolous disease.*

I hope you will excuse my solicitude, when I inform you that I have six cases in my own family; and many of my friends suffering great anxiety. Please to write me as soon as possible, and give me all the information in your power.

Having for twelve years been a practitioner of medicine, and in many instances attended patients suffering with small pox, I feel no anxiety on my own account, but am exceedingly desirous to quiet the alarm, which has thrown this section of the country into the utmost confusion.

Yours, respectfully,

BEN: F. HUNTER.

Copy of a letter from Dr. John F. Ward, of North Carolina, to Dr. James Smith, of Baltimore, dated 28th of January, 1822.

Sir,

I should have written you before this time, had I not have understood that Dr. Hunter had apprized you of the contagious nature of the disease produced by the matter you sent me. It has also appeared in the public prints. Not less than forty or fifty persons are now labouring under the disease taken in the natural way. Five only, as yet, have fallen victims to this dreadful disease. Many are recovering from it, but I have just visited two, who I think must die. I have not time, at this moment, of stating to you the symptoms and dates thereof of those cases which I have attended. I discover it is a disease which the vaccine arrests in its progress. I, however, have known two persons, who have

been vaccinated, take the disease. What effect the vaccine had upon them I know not. I shall make all the observations I can upon the cases that come under my notice, and keep a correct history of them. The matter which I used after I suspected small pox, was the produce of matter you sent to Dr. Hunter before the 6th of November. It had a very happy effect. You will no doubt be surprised to learn that so many cases have occurred in the natural way, when I inform you that I vaccinated at such an early period, after suspecting the nature of the disease, and that it had the most happy effects. But, sir, very few believed with me that it was small pox; and Dr. Hunter and Daney, in my absence from Tarborough, while at my father's, issued certificates, stating that the report of small pox being in town and its vicinity, was false and unfounded, in open contradiction to an opinion which Dr. Boyken and myself had expressed in a note addressed to the Commissioners of Tarborough, before I visited my father. I expressed my opinion freely to the citizens of Tarborough as soon as I suspected the nature of the disease. I vaccinated in the families where the suspicious disease was, as soon as I could obtain matter. I made application to three different places for matter, viz. to John Cameron, of Fayetteville, Dr. Purrington, Scotland Neck, and Henry A. Donaldson, Falls of Tar river. I obtained it from the last mentioned, who obtained it some time before from Dr. Hunter. I received matter afterwards from Mr. Cameron and Purrington. Every part of my conduct, after I suspected the nature of this disease, I now contemplate with the greatest pleasure.

In consequence of this disease I have been much abused; have been charged, by some, of introducing it from lucrative motives; and, in addition to which, and worst of all, am accused of having received matter marked with the *Latin word* for *small pox;* and this has been magnified until it has become a serious charge. It originated in consequence of noticing the mark at the bottom of the printed sheet of *established regulations* of the general institution, &c. which is thus—"Variol. |::| 4. Oct. 1821, Whitford."

In my first communication to the Commissioners, I sent all the papers I had received from you at the time I received the impure matter, requesting it as a favour that they would read them, in order that they might know in what manner this disease had been introduced. Some of them noticed the mark, and requested to know what it meant, but was quite ignorant of it until I explained the meaning of variolous, supposing "variol" an abbreviation of the former word. That I supposed it some private mark best known to yourself; that I recollected, if I was not mistaken, to have seen a similar mark on papers that you had before sent me. Dr. Hunter was present, and thought as I did, or pretended to think so, but since that time has most basely used it as an instrument to injure my character. Write me what you know about it, and state to me what other persons you have sent similar papers to with genuine vaccine matter, as I have no doubt you have not only recently, but formerly, sent the same papers with marks similar to many. I should be glad you would inform me, as far as you are able, how this unfortunate mistake was made.

Several persons have been attacked here with small pox, after being vaccinated from four to six days, and they

(their crusts) have much the appearance of the vaccine. I shall be careful to preserve them, as they may be of some service to you, &c.

I close this letter in haste. No mail comes to Tarborough at this time, and I have to send this letter to a distant post office. Please write me to Tarborough, by the way of Sycamore Alley, Halifax, or Washington, N. C.

Yours, respectfully,

JNO. F. WARD.

Dr. Jas. Smith.

Copy of a letter from Dr. James Smith, addressed to the Citizens of the United States, and published in the Baltimore American.

It has been stated to me, in a letter lately received from Dr. John F. Ward, of the village of Tarborough, in the state of North Carolina, dated Bertie county, Dec. 29th, 1821—"That the vaccine matter sent to him from this Institution, about the first day of November last, had a different effect upon those he vaccinated than could have been expected!! And I have since heard, from other persons in Tarborough, that the disease which has been lately introduced there is the natural small pox."

I think it proper, therefore, to state this information publicly as I have received it, without pretending to account satisfactorily for the accident which has happened. My most anxious desire is, that all concerned may be put as fully on their guard against the evil consequences of this occurrence, as the nature of the case will admit of.

The citizens of any part of North Carolina, who may be exposed to danger from this accident, are invited to address themselves directly to me through the Post Office, and the means of securing them from the small pox will be forwarded immediately.

The following facts and observations will, I hope, assist those who are most concerned to investigate and arrive at just conclusions on the subject of this notice. But neither the personal abuse or illiberal execrations that have been heaped upon me, as the ostensible instrument of evil in this case, can answer any good purpose whatever.

Every fact that I can ascertain, having any bearing on the subject, shall be fully and freely made known to all concerned. And if I have committed any mistake, either from ignorance or through carelessness, I shall not ask any indulgence. I shall only add on this subject, that if I should find it to be out of my power to preserve the vaccine matter in a pure state, I will cease to furnish that which I may have any reason to fear has become adulterated. I have derived my supply of matter, for the last six weeks, from places that are free from any epidemic disease; and I consider it to be as perfect and genuine as any I have ever used.

By steadily persevering in the practice of vaccination for many years, we had completely banished the small pox from this city, and many began to imagine we would never again be visited by it. Our fancied security, however, served to create the same neglect of the kine pock as is common in other places, until we had many subjects fit to be preyed upon by variolous contagion—and in this situation we were found suddenly exposed to great danger by the arrival of the Pallas, captain Otis,

on the 14th August, fifty-nine days from Liverpool, with a few passengers, having among them the small pox.

The following extract from our bills of mortality, will serve to shew the progress which this disease has since made among us:

Deaths by small pox in Baltimore.

In October		2
November		2
December,	1st week,	6
"	2d "	2
"	3d "	4
"	4th "	9
January,	1st week,	6
"	2d "	16
		47 deaths.

But, from the beginning of these misfortunes, the current opinions, not only of the people here, but of many of our first physicians have been much distracted by certain new and unexpected modifications of disease, which seem to have been introduced here along with these calamitous events.

Many persons, who had been formerly subjects of the natural small pox, or who had been inoculated for it, as well as others who had been vaccinated with the greatest care, have again become sufferers from this apparently new contagion. But the disease produced by it in persons who had been previously vaccinated or inoculated, has invariably appeared in a more mitigated form than when it has attacked those who had not used these precautions. It has been called here, as well as in Europe, where it has lately excited considerable attention, the *varioloid disease*.—It is not easily distinguished from

the small pox; and, perhaps, it may be truly entitled to the appellation of this contagious plague.

Of those who have been previously vaccinated here, some have suffered very severely from the varioloid eruptions, *but I have not perceived any good reason on this account to doubt the efficacy of vaccination as a sufficient and invaluable remedy against the small pox.*

There are some physicians of great eminence here, nevertheless, who seem to have lost their confidence entirely in vaccination, and among these I am sorry to enumerate my distinguished friends, Drs. Davidge and Potter, professors of surgery and anatomy and the theory and practice of medicine in the University of Maryland.

The first mentioned of these professors, has not only declared the kine pock to be of no use, but he has again recommended, and is now practising the old inoculation for the small pox. Dr. Potter* acknowledges the prophylactic powers of vaccination, but he is of opinion that we have not yet attained any method of determining with certainty, whether those who are vaccinated do really obtain security thereby from the small pox, or not, until they are exposed to its contagion, by inoculation, or otherwise.

But Jenner himself, the illustrious discoverer of vaccination, has more seriouly defamed the kine pock, than any author I have read on this subject.—He states that a single serous blotch upon the body existing during the progress of the vaccine vesicle on the arms, may occasion such irregularity and deviation from correctness, that vaccination under such circumstances cannot be

* See his letter to Dr. Smith, Vaccine Inquirer, page

depended on.—Slight abrasions of the skin behind the ears, and upon many other parts where the cuticle is thin, he adds, will produce the same effect." Now if any such difficulties and nice distinctions as these, did really exist, we should certainly be obliged to abandon vaccination very soon, or the chief part of our population would ere long be found to be fit subjects for the small pox. But it is more than fortunate for mankind that the efficacy of the kine pock as a preventative of the small pox, does not depend upon the skill or opinion of any man, or set of men. It has come to us from the *Giver of every good gift*, sufficiently perfect for the end that is to be accomplished by it, viz: TO SECURE US FROM THE SMALL POX. But if we would obtain this security without having to regret any exceptions to the general rule, it is essentially necessary that not only a few individuals, here and there, should use the kine pock; but the people generally should subject themselves to vaccination at a suitable age, and as universally as the nature of the case will admit of, without injury or inconvenience to society.

Whether the disease which has been introduced into the village of Tarborough, be really the true small pox or not, I am not prepared to declare with any positive degree of certainty. The directions which I sent with the matter were, as is too frequently the case, entirely neglected. If Dr. Ward had used the matter I sent to him in proper time, and attended to send me the crusts which it produced, I would have been able to have answered all his queries, and would likewise have prevented all the mischief which I fear has happened.

I can only state to the public then, at this time, that the evidence which I have received from Tarborough, is

neither full nor satisfactory to me, as to the nature of the disease produced by the vaccine matter which I sent to Dr. Ward. I am inclined, however, to suspect that the small pox contagion did really accompany the vaccine virus put up here, and was transmitted to him, by me. My reasons for supposing this to be the fact, apart from Dr. Ward's statements, are these :

1st. I have been unavoidably engaged in attending to persons diseased of the small pox here. I daily visit, handle, and administer medicine to them—and although I have always taken every precaution that I knew was necessary to prevent this contagion adhering to my person—Still such an accident may have occurred.

2d. The genuine kine pock, is in itself so nearly allied to the small pox, that when this plague becomes epidemic in any place, it intermixes with the vaccine matter by a natural process, and in a manner that may possibly have illuded my care and vigilance to prevent it.*

3d. The same persons or subjects, from whom the vaccine matter must be taken, (for it cannot be otherwise procured than from persons who are fit subjects for it) may be the bearers of the genuine kine pock, and of the true small pox, at the same time. *

4th. The same identical kine pock vesicle, under such circumstances as we are now unhappily involved in, and that will furnish the most pure and genuine vaccine matter, on one day is susceptible of a change in its natural properties ; and within a few days afterwards may furnish a different matter, capable of generating the most destructive small pox.*

* Dr. Smith proposes to shew, in the future numbers of the Vaccine Enquirer, from facts which have fallen under his own

There are but few practitioners of vaccination who have any idea that in the selection of the vaccine matter they may be exposed to so much danger, from causes of this description—and no one has as yet pretended to account for them.

As these causes of defection in the vaccine matter, however, (and others will be hereafter enumerated) are of serious import to the public, I have stated them plainly, that all concerned may be put fully upon their guard, not only against my own mistake, but against the mistake of others, who may possess even greater skill in this business than myself. I do not state these difficulties to excite any foolish alarm about them—but I hope they will have the effect, at least, to excite public attention to them

But, to conclude, if there is any person who can account for the difficulties which have presented themselves, and the new combinations of disease which have taken place, and threaten to extend their influence so far around us, let him come forward to lend his aid, and settle these differences of opinion which now distract the learned, as well as the unlearned, on the subject of vaccination. He who can accomplish this task, will merit a reward from mankind even greater than he received who first transferred the vaccine virus from the cow to the human species.

JAMES SMITH, U. S. Agent of Vac.

Vaccine Institution,
Baltimore, January 24, 1822.

observation, that these positions are really true, and that it becomes us to beware of the new difficulties that have arisen and will yet arise from this source, to mankind.

Copy of an Address to the Public by Dr. John F. Ward, published in the Raleigh Register.

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SMALL POX.

Messrs. Gales & Son,

Having noticed an address to the citizens of the United States, by Dr. James Smith, of Baltimore, in which he endeavours to account for the introduction of Small pox into Tarborough and its vicinity, I was not a little surprised to find, that he had charged me with entirely neglecting the directions which accompanied his fatal matter.

He also states, that "had I used the matter he sent me in *proper time*, and attended to sending him the *crusts* which it produced, he would have been able to have answered all my queries, and have prevented *all* the mischief which he fears has happened." A detail of my conduct in this business will prove to every reflecting mind, that the Doctor's assertions are both illiberal and unfounded.

You will please insert, for the information of the public, those rules and directions to which he alludes, and which accompanied the matter that has produced the small pox among us.

—

NATIONAL VACCINE INSTITUTION.

Baltimore, 1*st November*, 1821.

Dear Sir,

Wishing to bring into effective operation, without delay, the plan which has been proposed to secure a free and general distribution of the vaccine remedy, I have taken the liberty to appoint you an auxiliary agent of the institution, for the county in which you reside; and

hope you will find it convenient to aid the efforts we are now making, with your influence and ability, to protect our country from the natural small pox—a disease, which you are well aware, has been for ages past, one of the greatest destroyers of the human race; and which, it is yet to be feared, will at some future day again visit our fellow citizens with a desolating arm, unless they will take heed in time, and use the means we now possess, to secure us from it.

The concurring testimony of every civilized country is in favour of the kine pock; and most clearly shows that general security from the small pox, if not the total extirpation of this contagion, may be obtained by a proper distribution of the genuine vaccine matter, under such regulations as will at all times afford a free and easy access to it, with plain directions for its use.

According to the plan, therefore, now proposed to attain these important objects, it will be the duty of the agent of vaccination for the United States, to keep up a constant supply of genuine matter; and to appoint a number of auxiliary agents, one at least in each county, wherein our plan may be adopted, to whom he shall forward fresh matter as often as may be found necessary; so that every citizen who may be accidentally exposed to the contagion of small pox, or who may at any time hereafter, wish to protect his family against it, shall have it in his power to procure the means of security immediately, free of any costs, and in any part of our widely extended country.

Much good has been already accomplished, under the the act of congress, passed in 1813, "to encourage vaccination." But, after all the experience we have gained, I am satisfied, it is only in some such way as now pro-

posed, that we can guard our fellow citizens effectually, for any length of time, against the fatal effects of the variolous contagion—a plague which may very aptly be compared to those destructive fires, that so often destroy our dwellings, and lay in ashes our most populous towns. When this disease is at first introduced into any place, it can easily be extinguished by an immediate resort to vaccination; but if we are unprovided with the kine pock matter, or delay its use for a short time, the small pox is certain to spread itself and soon carries terror or death into every family liable to take it.

Should you find it agreeable to accede to my wishes, you will please, by the return of the mail, to signify your consent to serve as one of the auxiliary agents of this institution.

Any communication from you, relative to vaccination, or any of the concerns of this institution, will always be received with great respect, and punctually attended to, by your obedient and humble servant,

JAMES SMITH,
United States' Agent of Vaccination.

NATIONAL VACCINE INSTITUTION.

Dr. Ward has been appointed an auxiliary agent of this institution for Edgecomb county, in the State of N. C.

JAMES SMITH,
United States' Agent of Vaccination.

Regulations relating particularly to Auxiliary Agents.

1. According to the plan of this institution, auxiliary agents are to be stationed in every county in the United States, wherein the sum of two hundred dollars or more may be subscribed and paid in donations for this pur-

pose—the genuine vaccine matter is to be sent to them occasionally, as often as it may be wanted for distribution. One person, it has been estimated, may conveniently perform the whole duty of this agency in any one county; but two or more will be appointed in the same county, if it should be deemed necessary or expedient at any time, to give greater facilities in the distribution of this remedy.

2. Physicians of the first respectability and extensive practice will always be preferred, if it may be found agreeable and convenient for them to act as auxiliary agents of this institution; and when appointed, they will be continued as long as they will perform the duties of their office carefully and with despatch.

3. Auxiliary agents shall not charge any fee for furnishing the vaccine matter to any citizen who may apply to them for it; but it is not to be presumed, that citizens who employ them to attend on their families, or to vaccinate any person, will, on this account, refuse to pay them the just compensation which these services must always entitle them to.

4. It will be the duty of auxiliary agents to receive communications relative to vaccination; and to take charge of every supply of matter which will be sent to them from this Institution. They may either apply this matter themselves, or give it, at their pleasure, to any other person who will make use of it. On the eighth day after using it, if it succeeds, a fresh production of matter may always be obtained from it, in sufficient quantity to supply any demand which will be made for it. If it should not be wanted, the packet containing it is to be returned at the end of thirty days after it is received.

5. If the matter should be used and have the desired effect, one or more of the crusts, being the produce thereof, is to be returned to the agent of vaccination for his examination. The crusts returned for this purpose must be put up in some fine lint or cotton and folded in a paper, whereon must be written the time when, and the name of the person from whom they were taken; they may be then enclosed and directed to this Institution. It is hoped that no auxiliary agent will, on any account, neglect this easy, but essentially important part of his duty. It is the chain by which alone their connection with this Institution can be permanently sustained, with convenience to themselves, or safety to the public. Those agents who do not attend to it must be discontinued, and others will be appointed in their stead.

6. A certificate of the examination of any crust returned to the agent of vaccination will always be given, if requested, free of expense.

7. If any supply of matter forwarded from this Institution should fail to take effect, as will sometimes unavoidably happen, notice thereof is always to be given forthwith to the agent of vaccination, whose duty it will be to renew it.

8. If any auxiliary agent is applied to for matter, when he may have none fit to be used, he may order it by post, and it will be sent immediately. But the commands of any citizen, who has contributed, or who may hereafter contribute to the support of this Institution, will always be attended to with particular fatisfaction.

9. The great object of this Institution is, to guard the people of the United States against the small pox, by a free and regular distribution of the genuine vaccine matter; and thus to put an end, if practicable, to all the suf-

ferings among us which have hitherto followed in the train of this formidable enemy of mankind. The friends of humanity, therefore, are requested, should they be informed of the recent introduction of the small pox into any part of the United States, to give notice thereof immediately, either to the agent of vaccination or to the auxiliary agent, who may be nearest to them. To receive notices of this kind, as well as to give the most early information thereof, to those whom it may concern; and especially to communicate these facts to this Institution, must always be considered as necessary contingent duties, which every auxiliary agent, who is anxious to give his assistance in this undertaking, will most cheerfully perform.

10. Until the clear capital required, or funds sufficient to defray the expenses necessary to be incurred to give permanent duration to this Institution shall be raised, any donation given or legacy left for this purpose will be thankfully received from any citizen of the United States, if forwarded to the Agent of Vaccination, or presented to any Manager of this Institution.

* *Managers.*

Josiah Meigs, Esq. Elias B. Caldwell, Esq.	*Washington.*
Rev. Stephen B. Balch, Dr. Thos. Henderson,	*Georgetown.*
Dr. Wm. H. Clendinen, Dr. James Smith,	*Baltimore.*

* Appointed at a meeting, convened in the City of Washington, on the 22d December, 1819, in pursuance of a notice given in the National Intelligencer for this purpose.

I wish the public distinctly to understand, that I received these communications, with the matter, from Dr. Smith, unsolicited, and without my previous knowledge.

Under regulation 5th, requiring "that if the matter sent should be used and have the desired effect, one or more of the crusts, being the produce thereof, is to be returned to the agent of vaccination," &c. I commenced using the matter. In the course of six or seven days, I had vaccinated nine persons. Twelve days after vaccinating the last, I found one of them, a female eight years old, and at the distance of thirteen miles from Tarborough, labouring under a very violent fever. I continued with her a few days, watching, very attentively, every symptom.

On the third day of the fever, a slight eruption was discovered on the face and arms. The following day, I had an opportunity of examining a young man whom I had vaccinated on the same day with the little girl, and found that he also had many eruptions. I was now convinced that the disorder was produced by vaccination; but what that disease was I could not conjecture. I immediately sent for Dr. James Philips, a neighbouring physician, to whom I had given some of the matter ten or fifteen days before. The Doctor arrived and informed me that he had used the matter in a few cases, and that it had produced an eruptive fever! After examining the cases before us, we agreed to visit those who had been vaccinated in the neighbourhood, and to meet on the following day, and to hold a consultation with regard to the nature of this disease. The public safety required that this subject should undergo the most deliberate investigation, and should it prove to be small pox, no time should be lost in proclaiming it such. With

feelings of this kind did Dr. Philips and myself meet the next day, and after carefully considering the subject, we concurred in the opinion that it was small pox. The first step which common sense dictated to me, was to announce to the citizens of this section of the country, my opinion of the nature of this disease, and to procure, as soon as possible, the genuine vaccine matter, the means calculated to check it. I therefore repaired to Tarborough the same day, where some of the suspicious matter had also been used. On my arrival, I examined the cases in town, and stated to several of the citizens of the place my suspicions; and, for the purpose of obtaining some of the genuine vaccine matter. I addressed a letter to John A. Cameron, Esq. of Fayetteville, sent an express to Dr. Purrington, of Scotland-Neck, and applied in person to Henry A. Donaldson, Esq. at the Falls of Tar River. From these gentlemen I had the satisfaction to receive some genuine matter, and in less than three days after I suspected we had the small pox among us, almost every family, in which the suspicious disease existed, were vaccinated.

Should further proof be wanting to remove every charge of neglect with respect to myself in this business, I would refer to a note addressed by me to the Commissioners of Tarborough, dated 21st December, 1821. In that I find stated, "that Dr. James Philips and myself conferred (the day before, viz. the 20th) on the nature of this disease, and the result of that conference, recommending, at the same time, that proper means should be used to guard our citizens against its contagion until the genuine vaccine matter could be procured."

Dr. Smith asserts, that had I used the matter *in time*, and sent him *all* the crusts, he would have answered all my queries, and have prevented *all* the mischief which he fears has happened. At what time I could have used his matter, and how I could have procured crusts without producing small pox, is to me inconceivable. He should have recollected that the disease gives off its contagion by the time the matter is concreted into crusts, if not before. Having procured the crusts at an advanced stage of the disease, and having transmitted them to him, I might have received, after the expiration of twelve or fifteen days, from Baltimore, the place of his residence, his prophylactics for preventing small pox. I know of no other preventive he could have sent me, except *his* kine-pock matter; but my confidence in *that* was, at this time, entirely destroyed. If Dr. Smith could have prevented all the mischief produced by the variolous disease in Edgecombe county, why has he not been more successful in arresting its progress in the city of Baltimore, where he resides, and where the greater part of the people have either been vaccinated, or have had the small pox? In this section of the country, not more than one in an hundred had been vaccinated previous to the introduction of small pox here. It was with great difficulty nurses could be procured to attend the sick. If I have deviated from Dr. Smith's directions in the use of his matter, I flatter myself that in the same proportion, have the people been benefited. So far, however, from entirely neglecting his directions, it will be seen that he acknowledged having received a letter from me, dated the 29th December, 1821, nine days after I suspected we had small pox. In this letter I enclosed to him a crust from one of the patients I first

vaccinated. In answer to my letter, he states "that the crust had no one appearance of the genuine vaccine, and he did not know what to make of it." I am sorry to say, after all my exertions to arrest this disease, many have taken it in the natural way. The unhappy circumstances which led to its farther extension were such as were neither in the power of Dr. Smith or myself to control. The disease was so mild in the first persons who had been vaccinated, and had progressed so far before I had discovered its nature, that many had received the contagion before they were the subjects of the genuine vaccine disease. Also the contrariety of opinion, not only among the citizens generally, but also among the physicians of Tarborough, contributed not a little to the propagation of this disease. Some, whose opinions were entitled to respect, asserted most *positively* that it was not small pox; and that greater confidence might be reposed in those opinions, offered to pledge every thing that was dear to them in its support.

Thus an almost unrestrained intercourse was kept up among the people, until many had taken it in the *natural way.* I have, at this moment, the consolation of reflecting, that the whole of my conduct, in this affair, is entirely approved by the inhabitants of Tarborough, and that they are quite sensible of the illiberality with which I have been treated by Dr. James Smith, U. S. Agent of Vaccination.

As Dr. Smith has acknowledged to have sent me the matter through some unaccountable and unfortunate mistake, which has produced small pox, I would admonish those who, from the vilest prejudice, have heaped upon me much personal abuse, to desist, lest they fall into contempt. Not a little has been said of the appear-

ance of a new disease in Baltimore, called *varioloid.* Whether it is the new disease we have among us, or true small pox, I am not at present prepared to say. But the new forms or modifications which may be supposed to distinguish this disease from small pox, so far as I have observed, are not more extraordinary than I daily witness in other disorders to which the human system is liable. And I have the pleasure of announcing to the world, that many of our citizens are the living monuments of the efficacy of the vaccine disease in shielding their constitutions against its invasion. No person, as yet, has suffered an attack of small pox, in this section of the country, who, I have reason to believe, had been under the proper influence of this benign remedy. As an auxiliary agent for the county of Edgecombe, I disclaim all further correspondence with Dr. James Smith. It is, however, my serious wish, that the National Vaccine Institution, as proposed by him, may be carried into effective operation, and that the citizens of the United States will not suffer it to languish in consequence of one fatal mistake. In order that public confidence in this Institution may be restored, I would suggest to its managers the propriety of an established regulation—That for the future no Vaccine Matter be collected for distribution, either by the Agent or Auxiliaries, in any part of the United States, where small pox may at that time prevail.

JOHN F. WARD.

Tarborough, 7th Feb. 1822.

Copy of a letter from Dr. John F. Ward, of North Carolina, to Dr. William H. Clendinen, of Baltimore, dated

TARBOROUGH, 21st of Feb. 1822.

DEAR SIR,

Inclosed are some papers, which I understand Dr. Smith, the vaccine agent, has expressed a wish to see. It is his desire that they should be forwarded to some respectable gentleman in Baltimore, that they may witness their delivery to him. You will please to hand them immediately to the Doctor upon their arrival.

You can state to Dr. Smith that I have published, in the Star and Register of this state, the circumstances attending the transmission of his matter to me, which has produced small pox. And to Dr. Hall, the member of Congress from this district, I have also communicated the same facts.

In my communication for the Star and Register, I omitted to state that the word variol, &c. marked upon the printed sheet, presented itself upon the back, and appeared to have been marked after having been doubled—and for fear an improper construction may be given it, I have stated this fact, very particularly, to Dr. Hall.

There is one circumstance which Drs. Smith and Hunter have incorrectly stated—"that of my having received the matter inclosed in the paper marked 'variol.'" The matter I received was wrapped in a scrap of old newspaper, and had neither mark or inscription whatever upon its back.

This fact I mentioned to Lewis D. Wilson, one of the Commissioners of Tarborough, and the first person in this place (except myself and a student of medicine)

who saw the mark: the same I mentioned to the Commissioners generally, at one of their meetings, and in the presence of Dr. Hunter. All this happened before the date of Dr. Hunter's letter to Dr. Smith.

In addition to the above, state to the Doctor that I received an instrument for the purpose, I presume, of vaccinating, inclosed with the matter from him, and contained in the same packet. It is very extraordinary that a vaccinating instrument should have been inclosed in a packet of small pox matter, "carefully marked variolous or small pox."

Yours, respectfully,

JNO. F. WARD.

Since writing the above, I find it is not in my power at present to send you the printed handbill which has the mark "variol," &c. stated to have been the paper containing the small pox matter sent me by Dr. Smith—this paper is at Raleigh, in the possession of the editor of the Register—but I e promised Mr. R. S. Smith that I will write immediately to Raleigh and request the editor to send you that paper without delay. As this paper may be of some importancee to me at a future period, I am under the necessity of imposing an obligation upon you to attend to the returning of it after Dr. Smith has made such use of it as he may wish. It is probable that paper will reach you in eight or ten days from the date of this.

J. W.

(To be continued.)

THE

VACCINE INQUIRER.

This work will in future be conducted by the Subscriber, who has been induced to undertake it in consequence of the friendly assurances he has received from the Society of Physicians with whom it originated; and who have engaged that they will continue to assist him to render it worthy of the patronage of the public.

The late prevalence of small pox in this city, has served to throw much light on the subject of vaccination; and has dissipated many of the fears that were at first entertained respecting the efficacy of this remedy as a preventive of small pox. Having been lately engaged among the poorest classes of our population, vaccinating them with a view to extirpate the small pox from this city, I am already in possession of many proofs of the benefits of this remedy. But, I am authorised by Dr. James Smith, late agent of vaccination for the United States, after all that has transpired under his observation, to give it as his opinion "that when perfect kine pock matter is used and the vaccine process is suffered to terminate without interruption, vaccination is a *sure preventive*, not only of the small pox, but also of the varioloid disease," which has been of late so prevalent in this city.

GIDEON B. SMITH.

Baltimore, May, 1822.

☞ Dr. Macaulay and Dr. Stevenson's Letters; also a Letter from Dr. Smith to Dr. Jennings, and his answer thereto—with other interesting papers, will appear in the next number of the Inquirer.

NOTICE.

If any number of this work should be sent to any citizen without his ordering it, the person to whom the same may be directed will please to consider it as an invitation to become a subscriber for the work—which it is now ascertained, will be continued to ten or more numbers.

If they should not want this work themselves, they may extend the invitation given to any other person; or if they please they may return the number sent, to the subscriber. ☞When any number is returned, it is requested that the same should be put up safely, in a good envelope, open at one or both ends, with the name and place of residence of the person who returns it, written thereon.

Five numbers will be furnished to any person who has remitted, or may remit, one dollar in advance for them, *postage paid;* or ten numbers for *two dollars.* If five dollars are paid in advance, three copies of the first ten numbers will be forwarded; or six copies for ten dollars.

Subscribers to the work will be received at twenty five cents each number, payable on demand.

All sums of money not less than five dollars, forwarded by post, on account of this work, will be considered as at the risk of the subscriber, *provided* his name is written on the face of the note or notes, and previous information thereof given to the post master, in whose office the letter containing such notes may be deposited. But the postage on all letters to the subscriber must be paid, otherwise they will not be received on any account.

GIDEON B. SMITH.

Baltimore, May, 1822.

THE

VACCINE INQUIRER;

OR,

MISCELLANEOUS COLLECTIONS

Relative to Vaccination.

BY A SOCIETY OF PHYSICIANS.

No. IV.

AN INQUIRY

Into the Causes and Effects of the Variolæ Vaccinæ, a disease discovered in some of the western counties of England—particularly Gloucestershire, and known by the name of the Cow Pox. By EDWARD JENNER, *M. D. F. R. S.*

(Continued from Page 108, No. III.)

WHAT else can constitute the difference between the small pox when communicated casually or in what has been termed the natural way, or when brought on artificially through the medium of the skin? After all, are the variolous particles, possessing their true specific and contagious principles, ever taken up and conveyed by the lymphatics unchanged into the blood vessels? I imagine not. Were this the case, should we not find the blood sufficiently loaded with them in some stages of the small pox to communicate the disease by

inserting it under the cuticle, or by spreading it on the surface of an ulcer? Yet experiments have determined the impractibility of its being given in this way; although it has been proved that variolous matter when much diluted with water, and applied to the skin in the usual manner, will produce the disease. But it would be digressing beyond a proper boundary, to go minutely into this subject here.

At what period the cow pox was first noticed here is not upon record. Our oldest farmers were not unacquainted with it in their earliest days, when it appeared among their farms without any deviation from the phenomena, which it now exhibits. Its connexion with the small pox seems to have been unknown to them. Probably the general introduction of inoculation first occasioned the discovery.

Its rise in this country may not have been of very remote date, as the practice of milking cows might formerly have been in the hands of women only; which I believe is the case now in some other dairy countries, and, consequently ,that the cows might not in former times have been exposed to the contagious matter brought by the men servants from the heels of horses.* Indeed a knowledge of the source of the infection is new in the minds of most of the farmers in this neighbourhood but it has at length produced good consequences; and it seems probable from the precautions they are now disposed to adopt, that the appearance of the cow pox

* I have been informed from respectable authority, that in Ireland, although dairies abound in many parts of the island, the disease is entirely unknown. The reason seems obvious. The business of the dairy is conducted by women only. Were the meanest vassal among the men, employed there as a milker at a dairy, he would feel his situation unpleasant beyond all endurance.

here may be either entirely extinguished or become extremely rare.

Should it be asked whether this investigation is a matter of mere curiosity, or whether it tends to any beneficial purpose? I should answer, that notwithstanding the happy effects of inoculation, with all the improvements which the practice has received, since its first introduction into this country, it not very unfrequently produces deformity of the skin, and sometimes, under the best management, proves fatal.

These circumstances must naturally create in every instance some degree of painful solicitude for its consequences. But as I have never known fatal effects arise from the cow pox, even when impressed in the most unfavourable manner, producing extensive inflammations and suppurations on the hands; and as it clearly appears that this disease leaves the constitution in a state of perfect security from the infection of the small pox, may we not infer that a mode of inoculation may be introduced preferable to that at present adopted, especially among those families, which from previous circumstances we may judge to be predisposed to have the disease unfavourably? It is an excess in the number of pustules, which we chiefly dread in the small pox; but, in the cow pox, no pustules appear, nor does it seem possible for the contagious matter to produce the disease from effluvia, or by any other means than contact, and that probably not simply between the virus and the cuticle: so that a single individual in a family might at any time receive it, without the risk of infecting the rest, or of spreading a distemper, that fills a country with terror. Several instances have come under my observation, which justify the assertion, that the disease cannot be propagated

by effluvia. The first boy whom I inoculated with the matter of cow pox, slept in a bed, while the experiment was going forward, with two children, who never had gone through either that disease or the small pox, without infecting either of them.

A young woman who had the cow pox to a great extent, several sores which maturated having appeared on the hands and wrists, slept in the same bed with a fellow dairy maid, who never had been infected with either the cow pox or the small pox, but no indisposition followed.

Another instance has occurred, of a young woman on whose hands were several large suppurations from the cow pox, who was at the same time a daily nurse to an infant, but the complaint was not communicated to the child.

In some other points of view, the inoculation of this disease appears preferable to the variolous inoculation.

In constitutions predisposed to scrophula, how frequently we see the inoculated small pox rouse into activity that distressful malady. This circumstance does not seem to depend on the manner in which the distemper has shown itself, for it has as frequently happened among those who have had it mildly, as when it has appeared in the contrary way.

There are many, who from some peculiarity in the habit, resist the common effects of variolous matter inserted into the skin, and who are in consequence haunted through life with the distressing idea of being insecure from subsequent infection. A ready mode of dissipating anxiety originating from such a cause, must now appear obvious. And, as we have seen that the constitution may at any time be made to feel the febrile attack of cow pox, might it not, in many chronic

diseases, be introduced into the system, with the probability of affording relief, upon well known physiological principles?

Although I say the system may at any time be made to feel the febrile attack of cow pox, yet I have a single instance before me, where the virus acted locally only, but it is not in the least probable, that the same person would resist the action both of the cow pox virus and variolous.

Elizabeth Sarsenet lived as a dairy maid at Newpark farm, in this parish. All the cows and the servants employed in milking had the cow pox; but this woman, though she had several sores upon her fingers, felt no tumours in the axillæ, nor any general indisposition. On being afterwards casually exposed to variolous infection, she had the small pox in a mild way.—Hannah Pick, another of the dairy maids, who was a fellow servant with Elizabeth Sarsenet, when the distemper broke out at the farm, was at the same time infected; but this young woman had not only sores upon her hands, but felt herself also much indisposed for a day or two. After this, I made several attempts to give her the small pox by inoculation, but they all proved fruitless. From the former case, then, we see that the animal economy is subject to the same laws in one disease as the other.

The following case, which has very lately occurred, renders it highly probable, that not only the heels of the horse, but other parts of the body of that animal, are capable of generating the virus which produces the cow pox.

An extensive inflammation of the erysipelatous kind, appeared without any apparent cause upon the upper part of the thigh of a sucking colt, the property of Mr.

Millet, a farmer at Rockhampton, a village near Berkeley. The inflammation continued several weeks, and at length terminated in the formation of three or four small abscesses. The inflamed parts were fomented, and dressings were applied by some of the same persons, who were employed in milking the cows. The number of cows milked was twenty-four, and the whole of them had the cow pox. The milkers, consisting of the farmer's wife, a man and a maid servant, were infected by the cows. The man servant had previously gone through the small pox, and felt but little of the cow pox. The servant maid had some years before been infected with the cow pox, and she also felt it now in a slight degree; but the farmer's wife, who never had gone through either of these diseases, felt its effects very severely.

That the disease produced upon the cows by the colt, and from thence conveyed to those who milked them, was the *true* and not the *spurious* cow pox,* there can be scarcely any room for suspicion; yet it would have been more completely satisfactory, had the effects of variolous matter been ascertained on the farmer's wife, but there was a peculiarity in her situation, which prevented my making the experiment.

Thus far have I proceeded in an inquiry, founded, as it must appear, on the the basis of experiment; in which, however, conjecture has been occasionally admitted in order to present to persons well situated for such discussions, objects for a more minute investigation. In the mean time, I shall myself continue to prosecute this inquiry, encouraged by the hope of its becoming essentially beneficial to mankind.

* See Note in page 4. No. I.

Extract of a letter from Dr. James Smith, to the Hon. John Sergeant.

Baltimore, 20th March, 1822.

Sir,

I perceive, by this day's Intelligencer, that the law relative to Vaccination has been referred to "the Committee on the Judiciary," and therefore take the liberty to enclose you all the papers which I have in my possession, connected with the accident which has happened in North Carolina, and which I think it probable has given origin to the inquiry you have to make. I beg the committee will give these papers an attentive perusal, and if any further explanations should be wanted I will attend with great pleasure to any request you may make.

If Congress should think proper to repeal the law of the United States "to encourage Vaccination," I shall regret it as a national evil; and if it was not through fear of intruding on the committee I would state such facts as would make it plain to you that such a course on the part of Congress would really prove to be a most serious public evil at this time. On my own private account, I could have no regrets on the repeal of this law. It never contained the provisions which I wished, and which I know are necessary to put it in the power of the agent to comply satisfactorily with the wishes of those with whom he must have intercourse by a constant correspondence. I have always found the execution of this law to be one continued scene of labour without profit; and I have had much trouble in teaching ignorant practitioners of medicine how to conduct Vaccination in differ-

ent parts of the United States, without any grateful return from them. If it should be the wish of Congress however to prevent any further accidents happening under my hand, as has been intimated by an honorable member from North Carolina, *I will most cheerfully resign my appointment, immediately*, that some other person, in whom the public may have greater confidence, may be appointed in my stead; for already the small pox is spreading abroad in various directions from this city, and will, I have no doubt, traverse the whole of our country, before it can be extirpated again.

That there should be some pure source, therefore kept up *without interruption*, from which the genuine Vaccine matter may be procured by those who will want it, is absolutely and indispensably necessary; unless, through some extraordinary caprice, we would wish to deprive our fellow citizens, without benefit to any person, of the very means of existence.

I have the honor to be,
With great respect,
Your most obt. and hum. sevt.
JAMES SMITH.

The hon. John Sergeant,
Chairman of the committee on the Judiciary.

P. S. As soon as you may make any use of the enclosed papers you may think proper, I beg you will return them to me. As some of them are to be sent back to Dr. Ward, through the hands of Dr. Clendinen. The papers are marked from A to L.

Dr. James Smith having enclosed to the honorable R. M. Sanders the first number of the Vaccine Enquirer, received from him the following letter:

Copy of a letter from the honorable R. M. Sanders, to Dr. James Smith, dated Washington, 25th March, 1822.

SIR,

I return the enclosed (No. 1 of the Vaccine Enquirer) received in due course of yours of the 14th instant. I feel no disposition to give any countenance, much less support, to a man who has been the means of doing so much mischief to the citizens of my state. Whether the mischief at Tarborough, N. C. arose from accident or design, though not equally criminal, is, with me, at least without excuse.

I have the honor to be, &c.

R. M. SANDERS.

Dr. James Smith.

Copy of a letter from Dr. James Smith to the hon. R. M. Sanders, dated Baltimore, 26th March, 1822.

SIR,

I received yours of yesterday, but cannot condescend to notice your insinuations.

Your letter is not such as I had a right to expect from a member of Congress, with whom justice should never be disturbed by wanton passion, and by whom the public interest will never, I hope, be sacrificed to local prejudices or any disingenuous policy.

I have the honor to be, yours,

JAMES SMITH.

Copy of a letter from Dr. James Smith to the Hon'ble John Sergeant.

Baltimore, 26th March, 1822.

SIR,

I have just received the enclosed newspaper from North Carolina, containing an address to the public from Dr. Ward, of Tarboro', (see page 132,) and I think it proper to submit the same to you, that it may have a place with the other documents I sent you a few days since, relating to this unfortunate accident, which I am sorry to perceive is likely to continue from local causes and personal disputes, to confuse and distract the public mind.

As the committee have in their possession the original paper that contained the small pox matter, bearing thereon my private mark, it would not be necessary for me to say any thing further in explanation of it, were it not for the certificate which has been given to Dr. Ward, by Mr. R. S. Smith, and which I fear may lead many persons to form the erroneous conclusions on this subject, which Dr. W. seems to have in view.

Mr. Smith is a young gentleman, who was taken by me as a student, about three years since. But he is not a Doctor of Medicine, as Doctor Ward states—neither is he any relation of mine. He is, however, which is of more consequence to him, a young man, I believe, of the best dispositions and great moral worth. He has not yet had the advantage, as Dr. Ward intimates, of a medical, or even a latin education; but being in my opinion capable, he was sent by me into North Carolina on business appertaining to

this institution; and hearing, while he was in the neighbourhood of Fayetteville, that the small pox had been introduced into Tarboro', he went there to enquire into the accident. I then gave him instructions to stay there, and to lend all the aid in his power to the people; without either fee or reward; to accomplish by vaccination the extirpation of this plague from among them. And this great object, I am happy to say, has been fully accomplished, not with virus derived from other sources, as Dr. Ward has intimated; but with genuine vaccine matter, derived from this institution. And if it had not been derived from this institution, (a source which it is now deemed expedient by some to destroy) I doubt much whether one particle of genuine vaccine matter could have been procured throughout the whole of the state of North Carolina.

After I had received Dr. Ward's first letter of the 28th December, I very naturally became exceedingly anxious to relieve him from the injury and odium he was likely to sustain from his having used the matter I had sent to him. I instructed Mr. Smith, therefore, to render Dr. Ward every service in his power; and desired that he should be governed by him in all matters relating to the difficulties in which he was placed. But I did not expect at that time that he (Dr. Ward) would be the first person himself who would make us such an ungrateful return for the exertions we were making to serve him.

Mr. Smith had been taught in my office all the characters or marks I find it necessary to use, to save me the labour of much writing; and he of course

would be led very properly to explain them to Dr. Ward. (⊙) is my character or mark for the genuine kine pock process, on the 8th day; and also for the vaccine fluid taken according to Dr. Jenner's rule of practice. [⊙] is the character I use for the vaccine crust itself. But as these marks are entirely for my own use, I never send them out of my office, to any correspondent or applicant for the vaccine matter—and if I did send them they would be of no use to any person—they could neither instruct or mislead any practitioner. But when I had prefixed to my private mark the word "Variol." which every physician of liberal education knows is the radical latin term abreviated for small pox, or variolus contagion; the idea of danger should have been conveyed at once to Dr. Ward, as it was to Dr. Hunter, as soon as he saw it.

Mr. R. S. Smith did not know the meaning, I presume, of the term "Variol." He has never been instructed in the latin beyond the grammar, and he never had any opportunity with my knowledge to become acquainted with this technical term. Dr. Ward had Mr. Smith under his direction by my orders, and it was in his power to explain it to him as meaning the "Variola vaccinæ," or the small pox, just as he might believe would best serve his own purposes.

I have no difficulty therefore to account for the manner in which Dr. Ward has obtained this certificate from my special agent; but the use which he has made of it, and the impression which he thereby endeavours to make on the public feeling, against Dr. Hunter, as well as myself, evinces to my mind, some design on his part, in this business, that I never be-

fore suspected. The English word *variolous*, is one in common use among physicians, but is not used as appertaining in any manner whatever to the vaccine matter. How then could it be possible for Dr. Ward, under these circumstances, to misunderstand the superscription? How could he be led to deceive me by stating in his letter of the 28th December, "that the *vaccine matter* he received from me, had a very different effect upon those vaccinated, than could have been expected." I do not like to indulge in uncharitable ideas of any man; but I do verily believe that if Dr. Hunter had not examined very minutely into this business for me, I should not yet have been able to have discovered or given any satisfactory account to the public of the cause of this accident.

Dr. Ward appears to have some personal difference or dispute with Dr. Hunter—a circumstance which it is to be regretted is too common among gentlemen of the medical profession. But I have no personal acquaintance with either Dr. Ward or Dr. Hunter.

Dr. Ward, in speaking of the marginal note, written on the paper containing the small pox scabs, says, "it is strongly impressed on his mind, that he had, on a former occasion, received papers from me with a similar note." Now, this is impossible. I never gave out a paper marked "Variol ⊐" to any person in my life. And I am certain I could never before have been so mysterious in my correspondence with Dr Ward, as to write him in hieroglyphics, such as no person could understand. Dr. Ward must have some purpose, some design unknown to me, otherwise I am led to believe he would not take so much pains to im-

press the public mind that I would intentionally send him matter to take the life of any person. If Dr. Ward did use the matter I sent to him, innocently and ignorantly, as an honest man he should say so—and his honesty, with every good citizen, would be a good excuse—it might, at least, attain for him that high place in the public estimation to which I am sure his experience in the small pox or vaccination will never elevate him.

I once remember, that an old physician in Washington County, in this state, 10 or 12 years since, got a portion of the genuine vaccine matter from me, and he used it in a family that he attended. From this family he took matter for his further operations, and after he had vaccinated, as he supposed, many persons in the circuit of his practice, which was considerable, the natural small pox was introduced among them, and all his patients, who were exposed to this disease, took it, except the first family that he had vaccinated. But while his neighbours were falling around him daily, the victims of his ignorance, I went to him nearly an hundred miles distance, to ascertain the true cause of the melancholy disasters which had happened. He met me as an honest man should, under such circumstances, and told me all he knew with candour and simplicity; acknowledging with tears in his eyes, that "to be sure he had a great deal of trouble," (he was a German.) But, he continued to add, "that the first family he had vaccinated, and from whom he took the *yellowest matter* he could get, would not take the small pox, although he had inoculated them again and again." I stopt the good

old man in this part of his detail, and informed him that he had told me enough. It was easy to discern the truth in his unvarnished tale; and the remedy for the further mischief that would soon have occurred, was easily applied. In taking the *yellowest matter* he could get, this old practitioner procured nothing but the common purulent matter from the first family he had vaccinated; and the disease or sore arms which he gave to all the others, had no power whatever against the small pox. The first family however served to furnish us with the strongest possible evidence in favour of the prophylactic powers of the true kine pock.

If it could serve to afford any useful information, I could relate you a volume of mistakes and accidents occurring in vaccination, the injurious consequences of which it has been one of the chief sources of my gratification to correct. The accident in Tarboro' is the first that has ever occurred to myself, and it has been a source of extreme pain to me, great expense, and much labour; and withal, which is exceedingly mortifying, it has afforded cause of exultation to many wicked men, who are destitute of the common feelings of humanity, and who would rejoice to see the pestilence prevail, rather than it should be under the controul of this institution. Among these men, there are some I know who would wish the world to believe I had "criminally and through design,"* introduced the small pox into North Carolina. But any such idea is absurd, and I feel myself as far above

* See Hon. R. M. Sanders' letter, page 153.

all such creatures as truth is above falsehood, or virtue above vice.

I have the honor to be,
With great respect,
Your most obedient and hum. servt.
JAMES SMITH.

The Hon. John Sergeant,
Chairman of the Committee on the Judiciary.

Copy of a letter from Dr. James Smith, to the Hon. John Sergeant.

Baltimore, 27th March, 1822.

SIR,

I beg leave to lay before you the enclosed letter from Mr. Robert S. Smith, with the communication I received in it. They will serve to confirm the hasty statement I had occasion to make to you yesterday.

I also enclose a copy of a letter I received from the Hon. M. Sanders, and my answer thereto. I wish all those papers to be returned, with other papers I sent you, when you shall have made such use of them as you may deem proper.

I have the honour to be,
Most respectfully,
Your obedient servant,
JAMES SMITH.

Hon. John Sargeant,
Chairman of the Committee on the Judiciary

Extract of a letter from Mr. Robert S. Smith, to Dr. James Smith, dated Tarborough, Feb. 24, 1822.

Dear Sir—I wrote you a few days since, in which I informed you of my obtaining what papers I could relative to the unfortunate accident which has occurred here, and also of my sending them on to Doctor Clendinen, whom I requested to deliver the same to you, in the presence of a witness, as you desired in your last letter to Dr. Hunter.

I enclose you a letter from Dr. Hunter, to Dr. Burgess, of Raleigh, which I was the bearer of. You will observe in Dr. H's letter to Dr. B. that I informed him that I was a relation of yours; but the doctor is mistaken; I recollect his asking me, if I was a connection of yours; I answered none that I knew of, and if there is any, it is distant. The doctor also calls me "doctor" in his communication to Dr. Burgess, but I can assure you, sir, I never made any pretentions to him of that kind; I shewed him my letter of introduction which gives me quite a different title.

Proceedings in the House of Representatives, on Thursday, 8th March, 1822.

Mr. Sergeant, from the committee on the Judiciary, to whom was referred a resolution of this House, requiring that committee to inquire into the expediency of repealing or modifying the law of 1813, on the subject of vaccination, moved that the said committee be discharged from the further consideration thereof.

Mr. Burton, after a few remarks, in which he deprecated the idea of our fellow-citizens being suffered, under the authority of our laws, to be slaughtered

by hundreds with indifference, asserted his belief that he should be able to establish the fact, that the vaccine agency is a mere nuisance, and one of the most dangerous kind, too, and ought therefore to be abolished or essentially changed in its details, moved that the subject should be referred for examination to a select committee.

The Judiciary Committee was discharged from the further consideration of the subject as moved, and it was referred to a select committee, as moved by Mr. Burton.

Committee on the subject of the Vaccine Agency:— Messrs. Burton, Hall, Whipple, Holcombe, and Darlington.

Copy of a letter from the Hon. Thomas H. Hall, to Dr. J. Smith.

H. Reps. 30th March, 1822.

SIR,

Being a member of the committee to which the subject of vaccination has been referred, I ask of you the favour to say, if to do so meets your approbation, what you believe is the proportion of subscriptions and money received, by contributions to the vaccine institution, from the interior of the country and the towns and cities on the maritime frontier. Also, if you please, to say, what amount of subscriptions and receipts has been obtained from North Carolina, within the last six months.

Your compliance will oblige,

THOS. H. HALL.

Copy of a letter from Dr. James Smith, to the Hon. Thomas H. Hall.

Baltimore, 2d April, 1822.

SIR,

The information you have solicited, as well as that which has been requested by the chairman of your committee, shall be furnished as fully as I can, and with as little delay as possible.

No erroneous impression should be made on the public mind by partial statements relating to this agency, I must therefore claim the privilege of submitting a full account of the whole of my proceedings relative to this institution.

If indulged in this fair course, I will be able I have no doubt to show to the satisfaction of every just and candid man, that I have not done as much mischief as has been intimated—and unless prejudged through intemperate passion, I will prove to you I hope that I am not capable of "slaughtering our fellow citizens by hundreds with indifference, under the authority of our laws," as you have heard stated on the floor of Congress.

I will thank you to lay this letter before the honorable committee appointed to inquire into the expediency of repealing the law passed in 1813, to encourage vaccination.

The expressions which I have quoted above, and which were intended to be applied to me personally by the chairman of your committee, forbid my holding any correspondence with him. I have on this account returned his letter unanswered, believing that no citizen of honorable feelings or delicacy

could wish me to act otherwise towards him on this occasion.

I have the honour to be, respectfully,
Your obedient servant,
JAMES SMITH.

Hon. Thomas H. Hall,
House of Representatives.

COMMUNICATION

Addressed to the Editors, and published in the National Intelligencer of Friday, 5th April, 1822.

GENTLEMEN—Having discovered that my remarks the other day, on the subject of vaccination, were not correctly understood, I take the liberty of correcting what was erroneous in the report of them. A motion was made by the Chairman of the Judiciary Committee, to be discharged from the further consideration of the subject. I then stated, that it was a matter of much more importance than those not immediately interested believed it to be. Ten of our fellow creatures, I said, had lost their lives—and by whom? By the act of a man who styled himself the agent of the United States, and a law of the United States had placed it in his power to do this irreparable injury. If this subject was not to be inquired into, what would be the impression on the public mind? Would not the boasted protection of life, liberty, and property, be considered a solemn farce, if the lives of our fellow citizens were to be taken, and passed over with the same indifference as if there had been so many cattle slaughtered? My object

was to repeal the law, or place the Institution on a more respectable footing, and make the agent in some way responsible, that the same accident might not again occur. I further said, I believed I could prove, to the satisfaction of any impartial mind, that the present agency was not only a nuisance, but a nuisance of the most dangerous kind.

H. G. BURTON.

April 4.

Copy of a letter from the Committee on the Vaccine Agency, to Dr. James Smith.

Washington, April 5th, 1822.

SIR,

The committee appointed to consider the expediency of repealing the law of Congress, authorizing the appointment of a vaccine agent, addressed you some days since a letter, requesting information, to which you have returned no answer; but have enclosed the letter under a blank cover, assigning as the reason your personal hostility to the Chairman of the Committee.

In a letter to Dr. Hall you offer to furnish the information required to him, and offer to inform the committee. To your communication with Dr. Hall, as an individual, for your and his personal convenience, the committee cannot object; but you must be informed, sir, that whatever personal feelings you may entertain towards our chairman, colonel Burton, yet you will not be permitted to disregard the official character of a chairman of a committee of Congress, and to direct your communications to the com-

mittee through any other channel. If therefore you will not consent to communicate with the committee through its official organ, the chairman, your communications will not be received.

We are, sir, your obedient servants,

THOS. H. HALL,
THOMAS WHIPPLE, Jr.
GEO. HOLCOMBE,
WM. DARLINGTON,
} Committee.

P. S. The Committee will suspend reporting, in the hope that the necessary information may be furnished to enable the Committee to give the subject all the deliberation which its importance demands, and which justice to individuals concerned requires. You will, should you think proper, notify the committee respecting your determination on the subject,

Ult Supra.

Dr. James Smith.

Copy of a letter from Dr. James Smith, to the Committee on Vaccination.

Baltimore, 7th April, 1822.

Gentlemen,

I have received your communication of yesterday, and as soon as I can make out the documents I am preparing, which will be in the course of a few days, I shall wait on your committee *in person,* if agreeable to you, to give the information you have asked.

I hope you will not be induced to suppose, from my having returned Colonel Burton's letter unanswered, that it was through any disrespectful feeling towards

a committee of Congress. I do not possess any such feelings towards the House of Representatives, or towards any of you individually or collectively.

Colonel Burton returned me unopened, a paper that I sent to him a few days since, while he was a member of the committee on the Judiciary, to give him information on this subject; then officially before him by direction of the House of Representatives. He has likewise exhibited himself as the slanderer of my character, in the columns of the National Intelligencer of yesterday, I cannot therefore sacrifice the proud feelings of a free citizen, so far as to notice any letters from him; unless I may be advised that your committee have a legal right to command me on this occasion to address you through him. If this is the case, my indignant feelings shall give way to a sense of duty, and I will instantly obey any such instructions as you may please to impose on me.

I have the honour to be,
With great respect,
Your obedient servant,
JAMES SMITH.

The Hon. Thos. H. Hall,
Thomas Whipple, Jr.
George Holcombe,
William Darlington,
} Committee on Vaccination.

☞ *The above letter was not forwarded in consequence of the receipt of a letter from the Honorable John Sergeant, dated 6th April, which see, and the answer thereto, as follows:*

Copy of a letter from the honorable John Sergeant to Dr. James Smith.

Washington, April 6th, 1822.

SIR,

I duly received your letters of the 20th and 27th ultimo, and the accompanying papers. The inquiry respecting the vaccine agency having been transferred to a select committee, I presented them the papers. They have been returned to me to day, and I have forwarded them to you in four parcels, by the present mail. Hoping they may get safe to hand,

I am, respectfully, your most obt. servt.

JOHN SERGEANT.

Doctor Smith.

Copy of a letter from Dr. James Smith to the honorable John Sergeant.

Baltimore, 8th April 1822.

SIR,

I have received your favor of Saturday, with the four parcels you were so good as to direct to me. On opening the packets last evening, I was surprized to find that some of the most important of my documents had been taken out before you enclosed them. I chiefly regret the loss of the original paper,* which enclosed the small pox matter that went to Dr. Ward in mistake, and on which I had written what it contained. I send back to you the envelops that covered these documents, that you may assist me to recover them. Should it be found impossible to obtain

* This paper was obtained by Mr. Sergeant from Mr. Burton, on showing him this letter, and Dr. Smith has received it. But the other documents have not yet been recovered.

them again, I shall not impute to you any design to do me the personal injury I am liable to sustain from their loss. You inform me in your letter that "the inquiry respecting the vaccine agency, having been transferred to a select committee, you handed them the papers, and that they had been returned to you on the day you enclosed them." I shall be able therefore from this statement to account to my own satisfaction, for the manner in which I have been deprived of these papers, without attaching the most remote degree of blame to you.

I also enclose to you again, one of my documents which you returned to me. It has been defaced, in the hand writing, you will perceive,* of Col. Burton, to *insult* me.

If you had looked over these papers, after they were returned to you, and before you enclosed them to me, I am satisfied you would have spared my feelings this outrage, which is of a character so peculiar, that no other person I presume than Col. Burton could ever have demeaned himself so far as to commit.

* The document alluded to, (copy of Dr. Smith's answer to Mr. Sanders, see page 153,) was defaced by writing on it, abusing Dr. Smith in the common slang of a blackguard. The hand writing is stated by Mr. Sergeant not to be Col Burton's. But it is the same hand writing as another paper in Dr. Smith's possession, (writer unknown) from the same committee. Dr. Smith's documents however cannot be supposed to have been defaced in this way, without Col. Burton's knowledge, as he only is known to have had them in his possession. Col. B therefore may justly be considered as the author, until he shows who is; or proves that the papers entrusted to him were neither plundered or defaced by his orders.

But, sir, if members of Congree have a right to deface documents that are submitted to them to illustrate any subject that may be referred to them; or if they can make so free as to deprive any citizen of the papers in evidence of his innocence, and then attempt to condemn him for not being in the actual possession of the same, what is to become of your attempt at correct legislation? I shall refrain from any comments.

Believe me to be, most respectfully,
Your obedient and humble servant,
JAMES SMITH.

Hon. John Sergeant, in Congress.

Copy of a communication from Dr. James Smith to the Editors of the National Intelligencer.

Gentlemen—

I will thank you to give a place in your paper to Dr. Thomas Hall's letter of 30th March, and my answer thereto. They will account to the public fully I hope for the inhuman attack which has been made upon me in your paper of Friday last, by H.G. Burton.

At some more convenient time I will pay particular attention to the assertions of this gentleman. I am now busily engaged making out such statements of my proceedings relative to this institution, as will afford the vaccine committee the information they have unexpectedly asked from me. I will only remark at present, I think it very strange that Mr. Burton should have stated on the floor of Congress, that I viewed with indifference the mortality which

occurred in Tarborough, from the small pox. Mr. B. had an opportunity, and I have no doubt read the whole of my correspondence with Drs. Hunter and Ward, of Tarborough, lately laid by me before the committee on the Judiciary. This correspondence was written in the moment of distress, and would alone have been sufficient to convince any man, who had one spark of humanity in his bosom, that any other feelings might have been ascribed to me, on this unhappy occasion, rather than feelings of indifference.

Mr. Burton also must be well aware I presume, that as soon as I received information of the accident, which had occurred, I directed one of my special agents, to go to Tarborough immediately, to give the genuine vaccine matter to all who wanted it, and to continue there, to vaccinate any who were exposed to danger. My agent (Mr. R. S. Smith) arrived at Tarborough, on the 4th February, and remained there rendering these services gratuitously, to many families, until the 1st March; and when Mr. S. left them there was not a case of small pox existing among them.

That the people in the neighborhood of Tarboro' where they are best informed of the nature and extent of the injury done, are not excited thereby to any feelings of hostility to this institution, I have had the most convincing proof in the cordial reception that they gave to my agent, and the undiminished confidence which they have since reposed in me. I am greatly at a loss therefore to account for that persecuting spirit which has arisen from the unhappy ac-

cident that has occurred and which threatens to pursue me as the particular object of its vengeance.

The law of the United States under which I act as agent of vaccination, exposes me to such vexatious, impositions, and to so many injuries from those who are strangers to me, that I would concur most willingly with Mr. B. in his wish to repeal it, if I did not know that many thousands of our fellow citizens would be soon left exposed thereby to the danger of small pox without knowing to whom or where they could apply for any remedy to prevent it. As it is however, I shall continue as heretofore, to struggle to support it, whether my reward shall be in a good or an evil report; and should this institution chance to fall in my day, under any of these combinations of interest or prejudice, which so frequently assail it, those who may suffer thereby, shall not have any complaints to make against me on the score of my "indifference." Your obedient servant,

JAMES SMITH.

☞ *The Editors of the National Intelligencer declined publishing any thing more than an extract from this communication, which see in their paper of the 20th April,* 1822.

Copy of a letter from the Hon. H. G. Burton, to the President of the United States:

Sir,

I take the liberty to inform you that, as chairman of a committee of the House of Representatives, and in pursuit of an inquiry they directed me to make, I addressed a letter to Dr. Smith, vaccine agent, asking from him certain information which the com-

mittee desired; instead of answering, Dr. Smith, with marked disrespect, returned my letter, as you will find enclosed; and at the same time addressed a letter to Dr. Hall, in which he speaks abusively of me.

Personally, I have no concern about the conduct of Dr. Smith, but feeling bound to vindicate the just authority of the House, so far as it has been confided to the committee, have deemed it my duty to give this information, and submit to your better judgment what is fit to be done.

H. G. BURTON.

N. B. This is my own proper hand writing.

H. G. BURTON.

Department of State,
Washington, 10th April, 1822.

Doctor James Smith, Baltimore,

SIR,

I am directed by the President of the United States to inform you, that he has revoked your commission as agent for the purposes designated by the act of Congres, of 27th February, 1813, entitled "An act to encourage vaccination." You will henceforward consider the said commission as revoked accordingly.

I am, sir, your obedient and hum. sevt.

JOHN QUINCY ADAMS.

Proceedings in the House of Representatives, on Saturday, April 13, 1822.

Mr. Burton, from the select committee appointed to inquire into the expediency of repealing the law

for the encouragement of Vaccination, made the following report:

The committee appointed to inquire into the propriety of repealing the act of 1813, to encourage vaccination, and if, on inquiry, it shall seem proper, to report a bill to that effect, have attentively and deliberately examined the subject, and submit the following report:

The recent unfortunate occurrence in the state of North Carolina, having involved considerations of the utmost importance to society, and intimately connected with the dearest interests of humanity, your committee feel it to be due to the occasion to commence their remarks by a distinct and unequivocal declaration of their entire and unshaken confidence in the efficacy of the vaccine disease as a preventative of small pox. In addition to the experience of the most intelligent medical men, in all parts of the world, the committee have the satisfaction to state, that even the late unhappy accident in North Carolina has been attended by the consoling circumstance of another and a triumphant evidence of the virtue of vaccination. The inquiry, therefore, appears to be very properly limited to the mere expediency of the existing law, which authorizes the appointment of an agent, from and to whom letters may be transmitted free of postage. While the committee would on no account offer a suggestion which could be construed to imply a doubt of the efficacy of vaccination, they conceive it may, nevertheless, be a question, whether the general government can beneficially interpose

for the furtherance of an object which seems, in a peculiar manner, to appertain to the municipal authorities in the several states, and which must, of necesssity, be finally committed to the management and discretion of professional men, possessing the confidence of the community. All our regulations for the preservation of the public health are questions of police, wisely committed to those who are immediately interested, and therefore most likely to adopt efficient measures for their own safety. And it is doubted whether Congress can, in any instance, devise a system which will not be more liable to abuses in its operations, and less subject to a prompt and salutary control, than such as may be adopted by the local authorities. The privilege of franking letters, conferred upon an individual, for the purpose of enabling him to distribute the vaccine virus, and thereby to accumulate wealth, by levying contributions from all parts of the Union, affords an instance of monopoly as repugnant to the spirit of our political institutions as it is to the character of the medical profession, which, for public spirited and active benevolence, is too well established to require auxiliaries of this description in the performance of its duties. But another and more forcible objection presents itself. An establishment of this kind, under the authority of the general government, naturally commands the attention of all portions of the country; and the numerous requisitions for the vaccine matter, from regions so extensive, must occasionally reduce any single agent to the necessity of either relinquishing the profered fee, or of transmitting matter of doubtful character. Sub agents must necessarily be employed to furnish a supply equal to the demand. Careless or incompetent assistants, guided more by cupidity than intelligence, may thus be instrumental in producing mischief, by the distribution of inert matter, or by the more

fatal error of disseminating a pestilence instead of a prophylactic. That such unhappy mistakes may occur, is but too well attested by the recent events in North Carolina. The committee are, therefore, inclined to the belief, that any single agency, for the whole Union, must always be liable to similar objections; and from which they apprehend no institution, clothed with the character of a lucrative monopoly or privilege, can be entirely exempted. If, however, it should be deemed advisable for Congress to continue to aid in facilitating the distribution of vaccine matter by the mode now in operation, the committee are of opinion that some of the evils to which they have adverted might be obviated by the appointment of two or more agents, judiciously located in our large cities, in different quarters of the Union. But, after mature deliberation, they have come to the conclusion that it would be still better to commit the subject altogether to the local authorities, who, with the aid of the professional men, will be more competent to the successful management of it—and to whom, they believe, it properly belongs. They, therefore, report the accompanying bill.

The report was accompanied by a bill to repeal the existing law; which was twice read and ordered to be laid on the table.

Copy of an explanatory letter from Doctor James Smith, to the Honorable Mr. Lloyd, read in Senate of the United States, May 1, 1822.

WASHINGTON, April 25, 1822.

SIR,

The bill to repeal the law relative to Vaccination, being under your consideration, I beg leave

to give the honorable Senate, through you, some information on this subject, that will, I hope, be acceptable to them. All the difficulties existing, in regard to the Vaccine agency, have arisen, I believe, from a conspiracy or combination of certain professional interests and individual prejudices, which, taking advantage of the unfortunate accident that lately occurred in North Carolina, has made the most erroneous and unjust impressions on the public mind. Many persons have been induced to believe that the Vaccine agency has hitherto constitued a monopoly in my hands, of the most odious kind. But the very reverse of this is the fact. My efforts have been always directed with all the zeal I possess, to render Vaccination universal, and to put it in the power of every family in the United States to have free access to this remedy at any time they might want it. The most liberal and enlightened of the faculty of medicine, to whom my plans to obtain this end have been submitted, have approved of them ; and lent me their aid that they might be carried into effect. But there are others who prefer their own private interests to the public good, and these do not cease to cry down the Vaccine agency; and they endeavor, by every means in their power, to prevent the free distribution of the Vaccine matter, which I have been striving to effect. Now if these lastshould succeed in their intentions, the people will soon be obliged to pay wel l for the Vaccin Remedy, when they can get it, and they will often have to do without it when they will most want it.

If I had never discovered the simple criterion by which the efficacy of every Vaccine process can be determined, without the necessity or expense of any professional attendance on the persons who are vaccinated, no prejudices, I believe, would ever have been raised by medical men against my Vaccine agency. By the examination of the vaccine

crusts, (and they can be sent to me by letter from any part of the United States,) I can decide as correctly on any case of Vaccination, as if I had been called in person, or had attended myself upon the individual vaccinated. This particular method of practice is founded upon a new discovery in Vaccination, which has not yet been fully developed, neither does it appear to be at all known in Europe. But highly useful and important as this method of practice is found, it threatens to cut off a source of profit from many physicians, who regard Vaccination only as a business of professional gain. It does not serve as any excuse with these practitioners, that I make no charges for examining the Vaccine crusts, or informing those of their safety from small pox, who have been perfectly vaccinated—*they* have lost their fees by my interference, and that is sufficient reason to support their determined hostility to my Vaccine agency. That physicians should be well paid for all those efforts of mind and body which they should make to relieve the sick, and to preserve the public health, I do not pretend to deny. I am perfectly sensible of the value of their services, and well know that they have never been either duly appreciated or sufficiently well paid for; but this affords no justification to the views of those who wish to prevent the free distribution of the vaccine matter. The operation for the Kine Pock is so simple, that any discreet person is fully competent to perform it. Nay, I have known children who have performed vaccination as effectually as any learned doctor could have performed it himself. The only difficulty that exists in this practice is to determine whether the true vaccine process has been produced or not. Now, whenever you come to this part of the business, it is not unusual to find the same disagreement of opinion existing among physicians as is common with them upon almost every

other occasion. The learned professor of the Theory and Practice of Medicine, in the University of Maryland, than whom no one, I believe, stands higher in the estimation of Medical men, yet denies that there is, or can be, any criterion by which the efficacy of the Vaccine process can be determined, except by repeating the operation until no local inflammation can be produced by it" Now, according to this practice the citizens of the United States could not expect to obtain any positive information whether they were secure from the small pox or not, during their whole lives. If the professor, therefore, with all his experience, in the use of the Kine Pock, cannot determine the simple fact, every individual who submits to vaccination is most anxious to learn how it can be expected that every Doctor of every degree can determine it always with perfect accuracy! But it is impossible that Physicians generally should ever obtain a sufficient practice to enable them either to preserve or select the Vaccine matter for their own use, or to decide the fact with invariable correctness, whether their operations are always perfect or not, by any other than the criterion I have pointed out, and which can only be generally servicible to the public by the establishment of Vaccine agencies.

But we have now scarcely obtained this knowledge of the Kine Pock, and brought into active operation an agency to extend this blessing among our people, than prejudices and jealousies are cherished, falsehoods of every description are circulated, and headlong we rush, propelled by a mere accident, to repeal the only law we have existing to encourage Vaccination! And shall we not thus evince to the world, that we are ready and willing to abandon all the ground we have gained? Or, that we are determined heedlessly to throw open our whole country for the special benefit of physicians, who

must all, now it is said, be brought at once, and without any guide, to preserve and select the Vaccine matter for their own use? If we adopt this course of proceeding, will not the same evils soon revert upon us, that we experienced before the establishment of this agency; which was scarcely one year in operatiou, until it corrected the mistakes that were prevalent in every direction?

The prevalence of the Small Pox in Baltimore, the seat of the Vaccine Agency, has been urged, with great plausibility, as one of the chief arguments against it; aud it has been stated, with how much justice you will see presently, "that my inability to extirpate this plague from the place of my residence, affords sufficient reason for you to break up my institution entirely." I must, on this account, inform you, that the Small Pox, although within this period it has ravaged both of the cities of New York and Philadelphia, has never been suffered to become epidemic in Baltimore, since the enactment of the law of 1813, until the present time. And on this occasion its prevalence with us is to be ascribed much rather to the opposition which has been made to the Vaccine agency than to the agency itself. This hostility to the Vaccine Institution has not arisen from any danger that is attached to it, or upon any injury or wrong that I have doue; but, if the truth was known, it has originated, as I have already stated, from the opposite of these causes. The great excitement, therefore, that has been so unwisely produced of late, will terminate, I fear, in an evil of much greater extent to the public than the accident which has given rise to it could ever have effected.

In the month of June, 1816, the Small Pox was imported into Baltimore, from Norfolk, and the infected person was suffered to lay in the midst of a dense population, liable to take it, and unavoidably

exposed to its influence. I was made acquainted with the first case of this plague as soon as it occurred, and gave information of the fact immediately to the public. All concerned were at once supplied with a sufficiency of the vaccine matter, free of any charges; and we succeeded to extirpate this contagion without any difficulty. About 500 persons were vaccinated in the infected neighborhood in the course of a few days—one negro man, only, the slave of a gentleman residing on the Eastern Shore of Maryland, lost his life on this occasion.

In May, 1817, the Small Pox was again introduced into Baltimore, from Philadelphia, but it was kept in subjection, in same way, until it was extirpated again, through the immediate operation of this agency.

In October, 1818, this plague was introduced a third time into Baltimore, from this city, and several persons lost their lives by it. The physician who had the first case under his care, denied that it was a case of Small Pox, and he took no proper precautions to prevent its infecting those who were exposed to the contagion; but genuine vaccine matter was furnished again, free of any cost, from this agency, and the prompt and decisive measures that were taken, at my suggestion, succeeded effectually, and the variolous plague was again banished from Baltimore, in the course of a few weeks.

Now, it is morally certain, that if the Vaccine agency had not been established in Baltimore, my place of residence, the Small Pox would have become epidemic there on each of these three occasions; and it would have proved no doubt as destructive then as it has been on this last occasion, when the necessary steps that should have been taken, were not taken in time to prevent it.

That the variolous pestilence, and its newly generated prototype, the vaioloid plague have been suf-

fered lately to become such severe scourges to the citizens of Baltimore is not my fault; neither can any blame justly attach to the Vaccine agency on this account.

If I had known, within any reasonable time, that the Small Pox had been imported into Baltimore on this last occasion, I would certainly have prevented any injury resulting from it, for I was on the spot, aud perfectly well prepared, and nothing was more easy to be done, or more within the compass of common prudence and common honesty to accomplish.

It was on the 14th of August last, that the contagion of our present epidemic was imported into Baltimore from Liverpool, but its existence was not made known to me, as it should have been. I discovered it by mere accident from the story of an old woman, who told me that the Small Pox had been several weeks among us. This was about the last of September, when it was too late for any individual to interfere with any chance of success.— The persons who first propagated the contagion were in a narrow street, in a thickly inhabited part of the city, and they were under the special care of the consulting physician of the Board of Health; but he kept their cases carefully out of my view, as well as concealed from the public, to prevent alarm, or to serve, perhaps, the mercantile interests of the city; but certainly without either judgement, discretion, or good sense. No blame therefore should be attached to me, any more on this account than for the accident in North Carolina, over which I had no control. Before I heard of the existence of the Small Pox in Baltimore, its contagion had been propagated to a considerable extent, and its further progress could not be arrested without one general and simultaneous effort on the part of the Physicians of the city. To obtain this effort, to be made with-

out the loss of an hour, I had a Circular printed, and sent the Vaccine matter to every physician who I expected would use it—But they very generally discouraged my interference, and a few of them only could be induced to lend any aid to accomplish that which was certainly within their power, if they had been inclined to extinguish the flame that had been just kindled among us. The late destructive prevalence of the Small Pox in Baltimore, therefore, should not be ascribed in any way whatever to the Vaccine Agency. The blame should rather attach to those who are hostile to this Agency, and who have left no means untried to accomplish their determination to destroy it.

It has been further alledged against this agency, in the House of Representatives, by a gentleman who is a stranger to me, and I do not know on whose authority he has made the erroneous statement, that I have drawn from the public something like forty-five thousand dollars by the Vaccine Agency. Now, the fact is, as you will perceive by the documents herewith submitted to you, fully proven and authenticated, that the whole sum of money I have received on the account to which he has alluded, amounts to no more than twenty-two thousand three hundred and thirty-seven dollars, in upwards of four years; out of which sum I have had to pay all the current expenses of this agency, during these four years, which, in printing and stationary alone, to furnish proper directions for the popular use of the Kine Pock, has amounted to more than all the fees I ever received for vaccine matter, since the enactment of your law of 1813; a law which induced the citizens of the United States, generally, to believe that I was paid by government for my services, when in fact it never made any such provision.

Out of the above sum, likewise, (a part of which has been paid to me in donations, and must be re-

turned to the donors,) I have supported twenty different special agents, who were employed and paid by me to serve those from whom I received it. These agents were furnished with horses, and they rendered six thousand seven hundred and fifty days services, vaccinating and distributing the Vaccine matter gratuitously, for the use of the rich as well as the poor—and we have secured, I believe, more than one hundred thousand souls from the Small Pox. It must be easy for you, therefore, to perceive, that it has not been "taxing the people at large for the benefit of the agent of Vaccination," as has been stated, that has occasioned all the clamor that has been raised against me. If those who have raised this clamor had vaccinated half the number of persons we have, they would have drawn from the people, ten times the sum of money for their services, and when they had drawn it, they could not be said to have drawn too much for such services.

It is true that the law you are now about to repeal originated at my request, but it never contained the provisions I asked and always declared were essentially necessary to make it answer the purposes for which I wished it. As the law itself therefore is defective, and we have no prospect under the excitement and misapprehensions that now prevail on this subject, to render it more perfect, I pray it may be repealed that an end may be put to the prejudices and jealousies it seems to have so unnecessarily and unjustly brought into existence. But in taking this step, I would wish the Senate to act on it understandingly, and I wish they would direct an examination to be made of the documents I had prepared at the request of the select committee of the House of Representatives, who reported the bill before you without allowing sufficient time to enable me to furnish them with the informa-

tion they asked from me. If these documents cannot serve any other purpose at this time, they would I have no doubt satisfy the honorable Senate that I have not been an useless or slothful servant or an unfaithful stewart over the trust that has been reposed in me.

But it is my determination, under all the disadvantages I must encounter, not to relinquish an institution which I established many years before the enactment of the law of 1813, and have conducted with so much benefit to those with whom I have had constant intercourse.

The genuine Vaccine Matter therefore shall be preserved and furnished as heretofore to all those who may apply to me, attending to such regulations as I have or may hereafter establish, to enable me to serve them faithfully and punctually.

I will attend in person to give you any further information in my power respecting the Vaccine Agency, if requested.

I have the honor to be, with great respect, your obedient and humble servant,

JAMES SMITH.

Extract of a letter from Dr. John F. Ward to Dr. Wm. H. Clendinen of Baltimore, dated

TARBOROUGH, 10th APRIL, 1822.

You will confer a favor upon me if you will send the paper that was forwarded to you from North Carolina containing the marginal mark "Variol," &c. to the Hon. Thomas Hall, Washington City, and in his absence to the Editors of the National Intelligencer. In addition to the above, will you be so good as to inform me by the first mail whether this character ⊐ is not Dr. Smith's mark for a "perfect Vaccine Crust." This was my impression when I received the matter from Dr. Smith which produced Small Pox, and it was my opinion that I

had seen the same mark on papers which Dr. Smith had formerly sent me enclosing Vaccine Matter. The Vaccine Matter I received from Dr. Smith was not folded in the paper upon which was written the word "Variol," How this happened, I know not, but it nevertheless is true, as you will see from the enclosed certificate. From the Vaccine instrument which was enclosed in the packet of matter received from Dr. Smith, I am inclined to believe that he did not put up the matter sent to me—therefore he could not have known whether the matter was actually folded in the paper containg the mark or not, as some other person must have handled the matter and might have changed it after it was marked by Dr. Smith.

TARBOROUGH, April 6, 1822.

I certify, that I was present when Doctor Ward first examined the papers enclosing the matter he received from Doctor James Smith, which produced Small Pox; and I assert that the matter was not contained in the paper upon which was written the word "Variol, &c." but that it, together with a small instrument, was enclosed in a piece of newspaper, and in which it remained sometime after the doctor received it. I used the matter first upon myself, in a few days after it was received, and afterwards on another person, while it was contained in said paper.

ETHELDRED PHILIPS.

Test,—E. P. GUION.

We certify that Etheldred Philips is a young man of the first respectability, and should not doubt the truth of any assertion which he would make

W BELL,
LOUIS D WILSON,
THOS PARKER
E. P. GUION:
} Commissioners of Tarborough.

PROCEEDINGS IN CONGRESS.

HOUSE OF REPRESENTATIVES, APRIL 29, 1822.

The engrossed bill to repeal the act to encourage vaccination, was also read a third time.

Mr. CONDICT moved to lay the bill on the table; which motion was negatived—Ayes 31, Noes 64.

The question then recurred upon the passage of the bill, which Mr. TAYLOR required to be taken by yeas and nays, which were thereupon ordered.

Mr. WOOD turned to the act of Congress of 1813, which is proposed by this bill to be repealed, which confers no power or authority on the person named by the President as vaccine agent, other than of transmitting and receiving letters free of postage, which, he said, appeared on the face of it so harmless if not beneficial a provision, he should like to hear some explanation of the objections to it.

Mr. BURTON assigned some of the reasons which had influenced the committee to report this bill. They were of opinion, he said, in the first place, that this subject was one strictly of internal policy, not properly within the province of this government but of the several states, whose duty it was to regulate every thing relating to health and police generally. He had no objection, if Congress should think proper, to extend the privilege of franking so far that it should be allowed to an agent for vaccination for each and every state and territory; but he was opposed to Congress itself establishing the agencies. In what manner, he asked, had this agency been conducted? In the city of Baltimore, the very seat of it, the small

pox, that scourge of the human family, had prevailed to an extent greater than in any part of the United States. Was this not sufficient to convince any man that the institution had not been properly regulated? No man at this day doubted the efficacy of vaccination to prevent the small pox. Why had it not been prevented in that very spot which was the seat of the Vaccine Institution? It was because it was rightfully a subject of state regulation, and could not be properly regulated by the government of the United States. This very agent, too, had sent the small pox matter into the interior of the country, where in all probability it would not have found its way for forty years, but for this agency. The British army, when it marched through that part of the country forty years ago, last communicated the small pox, and he thought it fair to presume that another foreign army was not likely to march through that country for forty years to come, to introduce it again. We had no wish for the small pox, said Mr. B. but it was sent to us in disguise; and this mistake alone was a sufficient reason for the repeal of the law. And, after having done this, the agent came out with an address to the public about some new disease, varioloid he believed he called it, which was calculated to destroy all confidence in the institution, and in vaccination itself. Afterwards, finding that this address was not satisfactory, he had come forward and acknowledged that he *had* sent the small pox matter to North Carolina, and that it was an accident which had never happened before, and in all probability would never happen again. That, Mr. B. said, might readily be. The

people who had been killed by it were not killed before, and could not be killed again. The government of the United States, he added, did not possess the powers which enabled other governments to legislate efficiently on this subject. In Denmark, for example, the people are compelled to be vaccinated before they can be married, and before their children can be christened they must be vaccinated. But this government could exercise no such despotic power; all that it could do, constitutionally, in regard to it, and the best thing it could do, was to let the people, who are both able and willing, take care of themselves.

Mr. Taylor, of New York, said that the act establishing the agency had been in operation for nine years, and he thought ought not to be hastily repealed. It was true, an unfortunate incident had occurred under the agency, which it was difficult to conceive could have arisen but from some negligence on the part of the agent. But would Congress repeal the law because of this one instance of wrong? If the agent has done wrong, said Mr. T. let him be removed. He had always heard this agent, however, spoken of as a man of great attention to his charge, who never failed to procure and keep on hand vaccine matter of the greatest purity. The most careful man may, from accident or momentary inadvertence, commit a mistake. If that be sufficient cause for his removal, let him be discharged. But, let there remain some institution, at which there is a reasonable probability of obtaining vaccine matter in its purity. Mr. T. said he had no acquaintance with the vaccine agent: he knew nothing of him but from his letters for several

years, and public report, which had produced an impression on his mind favorable to the Doctor. The gentlemen who lived nearer to him were better able to judge of his qualifications than he (Mr. T.) could. But, never, on this or any other occasion, would he repeal a law to get rid of any individual whatever, unless it was in an extreme case—

Mr. Burton here stated, that it would perhaps save the gentleman some trouble to say, that the President had fully examined the case of the late occurrence in the vaccine agency, and, being satisfied of mismanagement on his part, had dismissed* the agent.

*It is extraordinary that any member of Congress should evince in his public speeches, so little regard to truth; or be so perfectly heedless of the great injury which the citizens of the United States are liable to sustain from such shameful misrepresentations.

We have seen a letter from Dr. Smith, dated 19th April, (only four days before the date of these proceedings) in which he states that he had on that morning waited on the President of the United States, and obtained from him personally his assurance, that altho' he could not then give this subject due consideration, he would attend to it. He also advised Dr. Smith to leave the documents he had relating to this business, in the office of the Secretary of State, with his assurance that they should be carefully examined.

But these papers have not yet been deposited with Mr. Adams. To save trouble in examining many detached manuscripts, Dr. Smith has retained them to get them printed, and they are now preparing in this form to be laid before the President.

Now we would ask, how Mr. B. could state in the House of Representatives, that "the President had fully examined this subject, and that being satisfied of his mismanagement, he had dismissed Dr. Smith from the office of Agent of Vaccination."

That it was proper for the President to use his power to stop the proceedings of the Agent of Vaccination for an inquiry into his conduct, as soon as it was represented to him that any injury had resulted to any citizen in a business of such unlimited importance to

The only question, therefore, now was, as to the abstract policy of the law proposed to be repealed.

Mr. TAYLOR said he had not before been apprized of the fact of the agent being dismissed. With regard to the policy of the law, he said there surely might be found in the United States some individual in whom the necessary confidence might be reposed, to discharge the duties of vaccine agent. It did appear to him to be derogatory to the character of the medical profession to suppose, because Congress could not apply municipal regulations to punish the individual for misconduct, they, therefore, could not properly exercise the power of establishing an agency for vaccination. This subject had been often before Congress since the year 1813, when the law first passed,

society, no one will deny—nay, it was his duty to do so; Dr. Smith was pleased that he had used this authority. And he looks with full confidence to the examination of his proceedings; not only for the approbation of the President, but for the approbation of every other person who has the welfare of his fellow creatures honestly at heart.

Dr Smith has been conducting vaccination upwards of twenty-one years. He has made many improvements in this new practice, and afforded greater facilities to the distribution of the genuine vaccine matter, than any other person in the United States. His efforts in this cause have been attended with invariable success, this accident only excepted—and it is not yet clearly ascertained (see page 186) that even this accident has happened in any way through his mismanagement or inattention to his duty. Shall all confidence then in his experience be destroyed at once without any deliberation or examination? Or shall prejudices against his Institution be encouraged to frighten people out of their senses and lead them to expose themselves to the small pox, rather than to take from his hands the certain means of protection from this plague, which he is still prepared to afford them?

and much had been said of it; but, as no considerations had heretofore procured its repeal, he hoped it would not now be repealed without due deliberation, &c.

Mr. Edwards of N. C. was in favor of the bill. What would be the effect of the institution, if permitted to exist hereafter, he could only be enabled to judge from what had been its effect heretofore. If the institution was a necessary one, there would be no objection to its continuance. But, Mr. E. said, his own idea was, that it could not be necessary.

Mr. Burton made some further remarks. All legislation, he said, went upon this principle: that, by possibility, agents may be dishonest, and it is therefore necessary to have some security against their being so. This security the government of the United States could not take of the vaccine agent. It was because this government cannot, and the state governments can, properly regulate this matter, that he wished this law to be repealed.

Mr. Condict said, he apprehended the House were about to act hastily, in repealing a law which has been in operation since the year 1813, and which was enacted with due deliberation. In Europe, such is the confidence in vaccination, as a preventative of small pox, that the governments compel their subjects, under severe penalties, to be vaccinated. But, under our free government, no compulsory measures can be resorted to; and he agreed with the gentleman from North Carolina, (Mr. Burton,) that the *state* governments are the most competent to legislate upon these subjects. We may, however, lend the aid of this government by the appointment of an agent to

furnish an ample supply of vaccine matter, and distribute it to those who may apply through the Post Office Department, *free* of *postage.* When the law now proposed to be repealed was first enacted, in 1813, it was the opinion of many respectable members, that the best plan would be to give the agent a salary to compensate him for his services, and cause him to distribute the matter *gratuitously* to every applicant. Others, however, doubted the constitutional power of Congress to apply the public money in this way, and the law now proposed to be repealed was passed. Whilst he would applaud the deep interest and solicitude of the gentleman from North Carolina, for the health and lives of his neighbors, he would ask of the House to pause and reflect, before they decide under the excited feelings of a moment, to lessen public confidence in the efficiency of a remedy against the greatest scourge which was ever visited upon the human family. Would it not be a matter worthy of inquiry, whether, instead of repealing the law, and thus subjecting the people to the additional expense of postage, it would not be better policy to modify the law so as to authorise the appointment of an increased number of agents in different parts of the country, for the more extensive diffusion of the benefits of vaccination? Would it not be good policy so to regulate the army and navy, as to compel every new recruit, every cadet in the academy, and every midshipman and marine in the navy, to be vaccinated? The President of the United States has already dismissed the agent, in consequence of the violent prejudices against him, growing out of his unfortunate

mistake in sending the small pox virus to North Carolina. Is not this a sufficient punishment for a single error? And who among us claims exemption from error? Who among us does not claim the privilege of being mistaken? Mr. C. said, he would venture to assert that 50,000 souls at least, and more, probably 100,000, have received from this agent the benefits of vaccination, through the instrumentality of this law, which you are now about to repeal. He hoped the House would pause and reflect before they decide; and for the purpose of affording time, he moved that the bill be postponed to the first day of the ensuing session of Congress.

Mr. Whipple, as one of the committee which reported this bill, gave the House his reasons for favoring it, at greater length than we are enabled to report them, not having advantageously heard them. He paid a tribute of respect to the motives of the act of 1813, establishing the Vaccine Agency; but did not think that the views of the authors of it had been realized. He stated the actual operation of the act, which had been to tax the people at large for the profit of the agent, who drew it from them by virtue of the monopoly which Congress had thus granted to him. It was in evidence before the committee, that, under the Vaccine Agency, something like forty five thousand dollars* had been drawn by the agent, from

* The whole amount of money here alluded to, as being received by the Agent of Vaccination, is $22,337, as proven. see page 183. Out of this amount, Dr. Smith has paid for 6750 days' services rendered by his special agents, vaccinating, and distributing the vaccine matter for the use of the individuals concerned. A sum not equal

different quarters of the Union. From all the facts, and comparing the benefits received, with the cost, &c. Mr. W. said it was doubted by the committee, whether the institution had produced any real benefit to the country. From inquiries made by the committee, it appeared to them, that, comparatively, little good had proceeded from it; and that individual interest would do more on this subject, towards the promotion of vaccination, the preservation of matter, &c. if left free to all, than could be done by any legislation by Congress. If the institution were to continue, the committee were of opinion that the law ought to be modified, &c. so as to make the agent more responsible for the performance of the duties understood to be devolved upon him by it.

Mr. Wright adverted to the inconveniences experienced before the discovery and general diffusion of vaccination, to show how important it was to cherish and protect it. He reviewed the evils of the small pox, and the great blessing, comfort, and cheapness of vaccination as a preventative. He expressed his doubts, indeed, whether the small pox had been sent to North Carolina by Dr. Smith, who had every motive to prevent his sending it; and thought it more likely to have been introduced by the North Carolina doctors, whose interest it was to have the people as sick as they could be. The nation, he concluded, was bound to diffuse such a blessing as vaccination by

to $4 per diem for each young man employed in this service, and furnished with a horse; much less than has been lately paid to the young men in this city for rendering the same services on foot.

every possible means; and he therefore hoped that this bill would not pass, but that another agent would be appointed, &c.

Mr. Tod asked, whether it was not a fact that a question had been raised as to the efficacy of vaccination? Whether there were not some doctors, or quacks, who pretend that vaccination is wholly useless? He knew, he said, that there were people in his country who went about preaching to that effect, and that the old fashioned small pox was the only thing at last. Now, if you repeal this law, said Mr. T. will it not be supposed that the whole legislature has lost confidence in vaccination? He asked another question: Whether vaccination had not, since its introduction among us, saved a great many lives? Whether there did not die of small pox, before the introduction of vaccination, more persons in six months, than now die in ten years? If this question was answered in the affirmative, he would ask another: Whether the question of the repeal of the act establishing the Vaccine Agency be not a very serious one? He knew that Congress could not compel an agent to perform the duties by punishment for failure, &c.—but, he asked, if the accident had not happened in North Carolina, should we have ever heard of the repeal of that law? If so, ought the House, from a momentary irritation, to repeal that law? If we were to legislate on this principle, said Mr. T. it is very well we have no authority to regulate steam boats: for, not long ago, a steam boat burst her boiler on the Mississippi or Ohio, and killed or wounded sixteen persons. A horrible accident! And if this House had had the power to

regulate steam boats, and any member from the West had moved, in consequence of this accident to his constituents, to prohibit their use altogether, Mr. T. contended it would have been just as reasonable as to pass this bill, &c. He repeated the idea, that Congress ought not, at this moment, to throw its authority in the scale against vaccination; and he therefore hoped the bill would not pass.

Mr. Eustis briefly delivered his sentiments on the subject of the bill.

The question on the passage of the bill was decided as follows:

YEAS——Messrs. Alexander, Archer, Barber of Con. Basset, Baylies, Bayly, Blackledge, Blair, Breckenridge, Brown, Burrows, Burton, Butler, Cambreleng, Campbell of N Y. Campbell of Ohio, Cannon, Cassedy, Chambers, Cocke, Conkling, Conner, Crudup, Cushman, Dane, Darlington, Denison, Dwight, Edwards of Con Edwards of N. C. Eustis, Findlay, Floyd, Garnett, Gilmer, Gist, Gross, Hall, Hardin, Harvey, Hill, Hobart, Holcombe, Hooks, Hubbard, F Johnson, J. T. Johnson, Jones of Ten. Keyes, Leftwich, Long, McCarty, McLane, McSherry, Matson, Mattocks, Metcalfe, Mitchill of Penn. Moore of Penn. Moore of Alab. Murray, Nelson of Mas. New, Overstreet, Patterson of Penn. Phillips, Pierson, Pitcher, Plumer of N. H. Plumber of Penn, Rankin, Reed of Mas. Reid of Geo. Rich, Rochester, Ross, Russell, Sanders, Sawyer, Arthur Smith, Alex Smyth, J S. Smith, Stevenson, Stewart, Swan, Tatnall, Tomlinson, Tucker of S. C. Tucker of Va Upham, Van Rensselaer, Van Wyck, Walker, Walworth, Whipple, Williams of N. C. Williams of Va. Williamson, Wood, Woodson, Worman —102.

NAYS——Messrs Baldwin, Ball, Barber of Ohio, Bigelow, Buchanan, Colden, Condict, Cook, Crafts, Cuthbert, Durfee, Eddy, Edwards of Penn. Farrelly, Gebhard, Hawks, Hendrichs,

Jackson, Kent, Lathrop, Lincoln, Litchfield, McCoy, Mallary, Mercer, Milnor, Mitchill of S. C Montgomery, Moore of Va. Morgan, Nelson of Md Nelson of Va Newton, Patterson of N. Y. Poinsettt, Reed of Md. Rhea, Rogers, Ruggles, Russ, Scott, Sergeant, Sloane, S. Smith, Sterling of Con. Sterling of N. Y. Stoddard, Taylor, Tod, Tracy, Vance, Warfield, White, Whitman, Woodcock, Wright.—57.

So the bill was passed, and sent to the Senate for concurrence.

SENATE, MAY 1, 1822.

Mr. Lloyd laid before the Senate an explanatory letter* from the late Vaccine Agent, (Dr. Smith,) and moved that the bill, with the letter, be recommitted; but, after some debate, this motion was lost.

It was then moved to postpone the bill indefinitely; and a debate of considerable duration followed, in which Messrs. *Morril, Macon, Lloyd, Dickerson, Holmes* of Maine, *Eaton,* and others, took part. This motion was also lost; and then

The bill was ordered to a third reading, by the following vote, and it was afterwards passed:

YEAS——Messrs. Barbour, Barton, Benton, Brown of Lou. Brown of Ohio, Chandler, Dickerson, Findlay, Gaillard, Holmes of Maine, Holmes of Miss King of Alab King of N. Y. Lanman, Lloyd, Lowrie, Macon, Pleasants, Rodney, Smith, Stokes, Talbot, Taylor, Thomas, Van Dyke, Walker, Ware, Williams of Miss Williams of Tenn —29.

NAYS——Messrs Eaton, Edwards, Knight, Morril, Parrot, Ruggles.—6.

* See page 176.

THE

VACCINE INQUIRER;

OR,

MISCELLANEOUS COLLECTIONS

Relative to Vaccination.

BY GIDEON B. SMITH.

No. V.

Letter from Dr. J. Smith to Hon. Mr. Clay.

Vaccine Institution, Baltimore, Feb. 3, 1824.

HON. HENRY CLAY,

Speaker of the House of Representatives.

SIR,

I deem it a duty I owe to the public, as well as to myself, to correct the information contained in my letter to the Speaker of the House of Representatives, on the fourth of February, 1822; in which I stated that I supposed I had inadvertently made a mistake, whereby I had sent a paper containing smallpox scabs to Dr. Ward, of Tarboro', instead of certain glasses of vaccine matter, that I intended to send him. A number of persons, it will be recollected, were inoculated with these scabs, and took the smallpox; and they again soon communicated it to others in the natural way, whereby several of the citi-

zens of North Carolina lost their lives. I have now sure grounds, nevertheless, upon which I can state, that I did not make the mistake, I presumed I had, and that all the mischief that occurred on this occasion was actually the result of a wicked trick imposed on me *designedly*, and with a view, most probably, to injure me personally in the particular business, in which I was then engaged as agent for vaccination for the United States.

I pray, therefore, that you will have the goodness to apprise the House of Representatives of my earnest desire to correct the erroneous impressions, that may have been made on their minds by this affair. And when they shall have been fully convinced of the vexatious manner, in which I was inevitably induced to accuse myself wrongfully, they will, I hope, adopt proper measures to repair, as far as may be in their power, the injuries that have been sustained by the public, as well as myself individually, on this account.

The facts relative to this unhappy affair, so far as they have been satisfactorily ascertained, may be briefly stated to be the following.

I had a small paper in which there was enclosed some smallpox scabs, procured "4th Oct. 1821;" to be used to test the perfection of the vaccine matter used in this institution. This small paper was properly labelled, to denote its contents, and so carefully put up that no harm could possibly arise from it. From the exposed situation, however, in which I had placed this paper on my desk, any person who came into my office, could easily perceive that it contained "Variolous Scabs," procured on the day above stated, from a per-

son named "Whitfield," whose case I had published about that time in our newspapers.

About four weeks after I had procured these scabs, I addressed two communications to Dr. Ward, viz. a *printed circular* appointing him to act as an auxiliary agent of this institution; and a written letter, in which I enclosed him some fresh vaccine matter, put up in my usual way, on glasses, with proper directions for its application. This *written letter* and my *printed circular* were both properly directed by myself, franked, and laid out on my office table, together with a number of similar communications, that I had put up and addressed to different persons, and I presumed they had all been carried to the post office by my servant in proper time. It now appears that all of these different communications were regularly received by the persons to whom they were addressed, *my written letter to Dr. Ward, containing the vaccine matter, only excepted.* This letter, although its receipt was acknowledged by Dr. Ward, (see his letter December, 1821, Vaccine Inquirer, p. 112,) has never yet been received by him, neither has it been since heard of or recovered by me. Dr. Ward, it seems, only received my *printed circular*, (*in which I did not enclose any matter.*) But in this communication, he found the smallpox scabs, together with the envelop I had labelled as above stated. Dr. Ward has since shown, that mistaking the nature of these scabs, and supposing they were a parcel of vaccine crusts, sent to him by me for distribution, he unfortunately used them as such. It has also been proven by Mr. E. Phillips, who was present when my printed letter was first opened, that the smallpox scabs were

found entirely separated from their envelop, and put up only in a piece of an old newspaper, in a confused state, such as they never were in while I had them in my possession. The commissioners of the town of Tarboro,' have further certified, that "Mr. Phillips is a young man of the first respectability, and that they should not doubt the truth of any assertion he would make." Other hands, therefore, unknown to me, must, I am certain, have been concerned in this nefarious and perplexing imposition.

My office was voluntarily opened, about the time of this transaction, for the use of the public, in consequence of the smallpox having been a short time before imported into this city from Liverpool; and people of every description, who were liable to take it, were earnestly entreated by me to come in and be vaccinated without delay. My services were offered to them gratuitously, and my office, as well as a spacious room adjoining it, was literally crowded from morning to night, by those who were eager to accept of my invitation. All practitioners of medicine were likewise publicly invited to call at my office for any supplies of vaccine matter they might want, free of any charges. Many of them came, and others sent for it, and all were served to the utmost of my ability. My whole time was absorbed in efforts to encourage vaccination, that I might thereby prevent the spreading abroad of the smallpox in any direction. I knew that my proceedings were viewed with a very jealous eye, by many of my opponents; but I suspected no one of such evil doings, as the worst of feelings only could have prompted to destroy such an institution as this is.

I am now fully convinced, however, that the paper

containing the smallpox scabs, as well as both of my communications to Dr. Ward, were taken surreptitiously out of my office, by some person or persons, *who knew well what they were about*, and that such use was made of them, before they were carried to the post office, as produced all the mischief that has occurred.

Dr. Ward led me unavoidably into the first mistake I made, by his writing to me, that the "*vaccine matter* I had sent him, had a very different effect upon those he vaccinated, from that which he expected; twelve out of fifteen, he stated, on whom he used this matter, had a crop of pustules."

This information, which I had then no reason to discredit in any particular, alarmed me exceedingly. It came from Dr. Ward at such time, and under such circumstances apparently, as left me no room whatever to doubt the accuracy of every word he had written. I was led, therefore, inevitably to conclude that I must have been deceived in the selection of the matter, I had sent him; and I was induced to believe that I had taken it from some patient, whose system had been previously influenced by the smallpox, then prevailing here; some varioloid state of the system, that I feared it might be impossible for me to detect. But I knew that if I had made such a mistake, it was morally certain, that many other places to which I had sent virus at the same time, would soon be infected with the smallpox as well as Tarboro'. In this unhappy dilemma, I deemed it to be my duty to take the plainest ground for the public safety, that I could devise, let the consequences to myself be what they might. I published, therefore, at once, a full and

candid account of what had happened, and of the difficulties that beset me in the selection of the vaccine matter. I assured the public, nevertheless, of my unabated confidence in vaccination; and to remedy the mistake, I supposed I had made, I advised all persons to whom I had lately sent any vaccine matter, to abstain from the use of it, until I could furnish them with fresh virus, taken from persons who had not been at any time exposed to the infected atmosphere, in which I was then myself so unfortunately situated. This fair and open course of proceeding, however, was most cruelly misconstrued, and every effort I was making to encourage vaccination on the safest plan, was exhibited to the ignorant and misguided, as portending the greatest possible danger to the public. The enemies of my vaccine institution, now gained the entire ascendancy over the public mind. The press groaned under their anonymous accusations against me; some accused me as a murderer; and Congress, as it were, driven by the general impulse, without listening to any of the explanations I offered to give them, repealed the law to encourage vaccination altogether!

And here among these hasty proceedings, adopted during the unhappy moments of popular dissatisfaction, we perceive the deep-rooted foundation, that was then laid for the present awful progress the smallpox has been ever since making in the United States.

The city of Philadelphia has suffered most, and yet continues sorely afflicted with this plague; within a few months past, she has lost upwards of two hundred of her citizens, who have fallen a sacrifice to it.

From Philadelphia, during the week past, we have received this contagion again into Baltimore; a young

man has taken it by sleeping in the same bed with a healthy person who came from Philadelphia, where he had been to visit his sister who had the smallpox.

But vaccination was lately resorted to so universally in this city, that we cannot suffer any great injury from the smallpox now. It will be from shameful negligence, if we lose a citizen by it.

I beg you will have the goodness to present the enclosed memorial for me to Congress.

While I remain, with great respect,

Your most obedient and humble servant,

JAMES SMITH.

DR. SMITH'S MEMORIAL TO CONGRESS.

To the honourable the Senate and House of Representatives, the Memorial of Dr. James Smith, late agent of Vaccination for the United States.

Your memorialist begs leave to call the attention of the honourable Senate and House of Representatives, to the present alarming increase of the Small Pox in the United States, in hopes that some effectual measures may be adopted to stay its further progress. The states of Pennsylvania, New York, New Jersey, Massachusetts, Connecticut, Delaware, Maryland, and Virginia, are now visited by this plague. It has been introduced into our chief sea ports, as well as into many inland places; and others it is feared will soon be infected not only to the destruction of the lives of our people, but to the great injury of the commerce of the United

States. The ships of our citizens are already subjected unavoidably to the expenses of a quarantine in our own as well as in other countries, and we perceive the contagion is still hourly increasing its poison, while unseen it is passing daily from place to place spreading terror and death wherever it goes.

Can any measures then be adopted to arrest with any prospect of success, the evils which impend over our country at this time from the Small Pox?

It may be considered presumptuous, perhaps, in your memorialist, to advise what is proper to be done on such a momentous occasion. But he hopes from the long and successful experience he has had in contending with the Small Pox, to the exclusion nearly of every other pursuit in life, he may be permitted to say that if Congress will only determine, that it is proper the Small Pox should be eradicated, or permit it to be done with their sanction, there will be no difficulty whatever in driving this great enemy of the human race out of our country, and securing the whole of our population against it.

The most effectual way to check the further progress of this pestilence at this time, and to secure our people from it hereafter, would be for Congress to adopt the most expeditious plan that could be devised, whereby the genuine Vaccine Matter could be distributed with proper directions for its use throughout every part of the United States. And this your memorialist has reason to believe could be very easily effected, if Congress would authorize the President to appoint a central agent of Vaccination, whose duty it should be to keep up a constant supply of fresh Vaccine Matter, to

be furnished free of any expense to any citizen of the United States, who might apply to him for it.

Besides this central agent, the President should also be authorised to appoint a number of local agents of Vaccination, one at least for every congressional district in the United States, whose duty it should be to receive occasional supplies of Vaccine Matter from the central agent, and to correspond with him from time to time in regard to its use. Every local agent ought to be a well known and respectable physician, residing in or near his own district, who would use his best exertions to preserve and furnish Vaccine Matter to any citizen who might apply to him for it.

The local agents would have no more than an easy and a very agreeable duty to perform, and they would require no compensation from government for their services. The central agent should be allowed such proper remuneration for his services, as would enable him to devote his whole time to the responsible duties of his office, and he should be obliged to furnish fresh matter occasionally, free of any costs, to all the local agents, to the surgeons of the army and navy, and to all others, as often as they might want it.

Such a plan as this would ensure the constant preservation of the only certain preventive of the Small Pox that is known to us; and if the free use of the Post Office was again given to encourage Vaccination, every citizen of the United States would have such easy access to the Kine Pock, that it would be their own fault entirely, if they suffered any injury from the Small Pox.

The local agents likewise would serve as so many checks upon any mistakes that the central agent might

make, while he in return would be competent to detect any mistakes that they might make by submitting the Vaccine crusts produced by their operations, to the test of a very simple but useful improvement in vaccination, discovered by your memorialist, and which he has good reason to believe affords the only certain criterion of perfect vaccination that is yet known. By this method of practice, however, it would appear it is not medical skill that is required in the business of vaccination, so much as it is a perfect knowledge of the Kine Pock itself. For by the criterion now proposed, any intelligent citizen, whether skilled in medicine or not, can be readily taught to give a correct opinion on any case of perfect vaccination that may be submitted to him without any intercourse with the patient, or enquiry, by whom, when or where the operation was performed. The method of practice here alluded to (by the examination of the crust,) is founded altogether upon the peculiar organization of the genuine Vaccine scabs themselves, from which the nature of the process and the effects necessarily consequent thereto, may be always determined with mathematical certainty.

Since the repeal of the law to encourage vaccination many practitioners of medicine have been obliged to buy their Vaccine matter from some of the numerous dealers in Scabs, who have lately offered them for sale, and much uncertainty in vaccination has arisen from their want of knowledge of the only criterion by which perfect Vaccine matter can be distinguished from that which is spurious or imperfect. There are many practitioners of vaccination, likewise, who being unwilling to pay for the matter they use, beg, borrow, or take it

just as they can most conveniently obtain it, and in this way these practitioners often deceive themselves, and practice the most gross abuses upon their employers instead of securing them from the Small Pox.

A case was made known to your memorialist not long since, wherein a practitioner of medicine in the state of Ohio, made a mistake in selecting matter, and only procured some of the morbid virus that is found occasionally adhering to the Vaccine crust. He used this morbid virus, supposing it to be vaccine matter, and the consequence was that the child's arm inflamed immediately to an alarming extent. Another physician was then consulted, but every remedy that was used failed; mortification ensued, and the child died on the third day after its supposed vaccination.

Another instance of the want of skill in the selection of the Vaccine matter, fell under the immediate notice of your memorialist himself. An old and respectable practitioner of medicine in this state, took some matter from a patient who had the kine pock in its utmost perfection, but he made a mistake, such as many others have often made, and he obtained no other than some common purulent matter that lay beneath the vaccina; and with this he *vaccinated, as he supposed*, a great many of his neighbours. They had sore arms, and the Doctor assured them they were all properly vaccinated. But when the Small Pox was afterwards introduced among them, all who were exposed to it took it. The greatest consternation and alarm soon seized upon the people, and they flew again for safety to the old inoculation for the Small Pox, and many persons lost their lives before the mistake was discovered.

It is well known, that in the city of Philadelphia a great proportion of the people (some say more than one third who have been vaccinated there by regular physicians) have lately taken that new variety of the Small Pox, that is now known as the varioloid disease. And many persons who had been induced to believe themselves secure from this plague have, notwithstanding, fallen a sacrifice to it. These are great evils, all of which your memorialist believes arise chiefly from the use that is generally made of imperfect and adulterated Vaccine matter. Your memorialist is greatly strengthened in this belief from the fact (of which he is happy to be able to give the fullest assurance to the public) that he has never yet known one individual vaccinated with perfect matter, and whose vaccination was suffered to terminate in a perfect crust, that has ever yet sickened with the Small Pox, or the varioloid disease. The surprising difference of result, therefore, that distinguishes the use of the genuine Vaccine matter from that which is imperfect, (if there were no other considerations to persuade us to perform this small act of humanity towards others,) should alone induce Congress, your memorialist humbly conceives, to provide a proper supply of perfect Vaccine matter, for the use of those who want it, and who do not know how to procure it.

The plan above proposed for the encouragement of vaccination throughout the whole of the United States, is not advised as a mere speculation or on its probable advantages. Your memorialist has already carried it into effect extensively, and speaks of it confidently from his own experience.

Your memorialist was employed six years by the state of Maryland, commencing from the first of January, 1810, when the natural smallpox was known to prevail in almost every part of the state. He gave the genuine vaccine matter, with directions for its use, free of any restraint to every citizen who applied for it. Thousands were supplied, and the smallpox was soon eradicated from among us, without the occurrence of a single mistake during the whole period of time, for which your memorialist was engaged to serve.

Your memorialist was also employed under a special agreement, from fourteenth April, 1814, to twenty-second March, 1818, by the state of Virginia; and he gave the vaccine matter from this institution, with proper directions for its use, to all who applied for it. Wherever the smallpox appeared, there he distributed its antidote in the greatest abundance; and he banished this plague from among her enlightened and hospitable people, with perfect ease to himself, and without exposing them to any danger.

Your memorialist was also appointed agent of vaccination for the United States; and served during the whole period of time (ten years) that the law to encourage vaccination existed. It is impossible for your memorialist to state how many of the citizens of the United States, from Maine to Florida, were secured from the smallpox, under his immediate direction. Suffice it, however, to declare, that no unfavourable accident of any kind ever occurred to him at any time, except the Tarboro' occurrence, which unhappily afforded so much exultation to the enemies of this institution. For the proper explanation of this unfortunate affair, however, your memo-

rialist begs leave to refer to his letter of this date, to the honourable Speaker of the House of Representatives.

The government of the United States never contributed any thing towards the general distribution of the vaccine matter, in which your memorialist was engaged. It was only granted by the law to "encourage vaccination," that all letters to and from him relative thereto, should be carried by mail free of any postage.

There were many respectable physicians and other enlightened citizens, however, who became subscribers to this institution for a supply of matter. These contributed some ten dollars and some less, so that your memorialist was enabled thereby to pay the expenses of this institution, and to extirpate the small pox from every place in the United States, where it was to be found. But the means thus afforded, although used with the greatest economy, have been long since exhausted, and your memorialist has been in consequence obliged to retire in some measure, from the contest in which he had been so long and so successfully engaged in opposing the progress of the small pox. It is a fact worthy of record, and one which your memorialist believes cannot be denied, that when the small pox was last imported into this city, from Liverpool, a few months before Congress repealed the law to encourage vaccination, "there was not a single case of this contagious disease existing in the United States, so happy was the effect of the general distribution of the vaccine matter, in which your memorialist had been engaged. A very different situation of our country, in regard to the small pox, from the calamitous state in which the United States are now to be

found, under the miserable system of selling vaccine scabs for the use of physicians only, that was recommended by some in preference to our giving this great *Dei Donum*, free of any costs to every citizen who wanted it!

Some physicians have endeavoured to impress the public mind with an idea, that it requires such great skill to perform vaccination; and that no private gentleman ought ever to attempt to secure his family from the smallpox, without first engaging the regular attendance of some physician to inspect every case daily. This great care may be well enough, when it is convenient, or when it can afford any satisfaction to the individuals concerned. But it is really unessential and unnecessary. The true vaccine process is always harmless, and so completely effective, that it requires no aid or interference whatever to promote it. It only requires *to be let alone.* The operation for vaccination is also perfectly simple and easy; indeed the insertion or planting of the vaccine seed, which is the only manual operation required, is better performed by a little patent instrument, termed the spring vaccinator, now often used than it can possibly be done by the hand of any person. To illustrate the great simplicity of the operation for vaccination, your memorialist will relate a case, that occurred not long since in the state of Delaware. A little girl, seven or eight years old, who had been vaccinated, undertook to play the *doctor* with her little companions. She took a thorn from a sweetbriar bush, to represent his lancet, and with this she opened the kine pock on her own arm, and then gently pricked the arm of all her schoolfellows. No notice was taken of this sport, until the

week following, when the children were found complaining of their arms. The doctor was then really called on, and to his great surprise he discovered that the whole school had been vaccinated. Here then without any great skill, and without any diploma from the college, we find a child conferring in her innocent play, in the highest degree of perfection, that inestimable gift of heaven, which is the only security we have against the smallpox.

Your memorialist has never yet known any one mistake of any consequence to be made in vaccination by any intelligent person, who undertook to secure his own family from the smallpox, when furnished with genuine matter, and proper directions for its use; ninety-nine out of every hundred mistakes that occur in this business, arise out of the attempts that are so commonly made by physicians and others to select vaccine matter for their own use. And in this respect practising physicians have been detected in a thousand mistakes for every one that the people have made themselves.

All which is most respectfully submitted by

JAMES SMITH.

Vaccine Institution,
Baltimore, Feb. 3, 1824.

☞ The above Memorial was referred, ninth February, to a select Committee in the House of Representatives, composed of

Hon. James W. Gazlay, chairman, *Ohio.*
Hon. Lewis Eaton, *New-York.*
Hon. Lewis Condict, *New-Jersey.*
Hon. John Floyd, *Virginia.*
Hon. Joel Abbot, *Georgia.*

Eighteenth Congress, }
first Session. }

REPORT

Of the Select Committee, to which was referred, on the 9th ultimo, the memorial of Dr. James Smith, accompanied with a bill to encourage Vaccination.

MARCH 4, 1824.

Read, and, with the Bill, committed to a committee of the whole House to-morrow.

The Committee, to whom was referred the memorial of Dr. James Smith, on vaccination,

REPORT, AS FOLLOWS:

The memorial of Dr. James Smith states, that the smallpox is now spreading, to a very alarming extent, to most of the great cities, and to many other parts of the United States; and that, besides the calamities immediately attendant on the disease, it necessarily suspends and interrupts commerce and intercourse between different portions of the Union. To arrest the progress of this scourge, and to prevent its future appearance, the memorial recommends the appointment of a general agent for the United States, and local agents in the several congressional districts, to whom the general agent shall at all times furnish the real vaccine matter, free of postage. The memorial also contains much detail, on the nature and distinguishable character of the vaccine from the smallpox or variolous disease. It also asserts, that medical skill is not required for the effectual and safe application of the vaccine matter; that this process may be performed by any person. But that, to insure confidence and success in the vaccine system, *great care, attention,*

and *experience*, are necessary, in obtaining and preserving the *true vaccine* matter, or crusts, and that if it be not pure, no reliance can be placed on it as a guard against the smallpox. To this point, much evidence, drawn from practice and long observation, is set forth; also, much evidence, tending to shew its ample protective character when pure.

In a paper accompanying the memorial, Dr. Smith has furnished statements, with extracts of letters, and a certificate of a Mr. Phillips, tending to show that the unfortunate occurrence at Tarboro' was the result of some wanton interference with his letter and directions, after they were by him enclosed, and before they reached Dr. Ward. That Dr. Ward is inclined to the belief of this fact, and made the first suggestion of it in April, 1822.

The Committee do not pretend to account for the unfortunate occurrence at Tarboro', nor do they see as much reason for imputing its wilful commission to those who were publicly engaged, and of course the first to be made responsible, as to some secret hand, not responsible. They beg leave to suggest the propriety and public necessity, for paying some respect and attention to the general sentiment, which prevails throughout the civilized world, in favor of the preventive power of the vaccine disease against the smallpox; and that to obtain security from the latter, which so materially affects both life and our maritime relations, cannot be less than a national object. They ask leave to report a bill, and with that view offer the following resolution.

Resolved, That the select Committee, raised on the subject of vaccination, have leave to report a bill.

A BILL

To encourage Vaccination.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States be, and he is hereby authorized to appoint, during pleasure, an agent, to preserve the genuine vaccine matter, who shall, during his continuance in office, reside in one of the Atlantic cities of the United States. It shall be the duty of said agent to appoint, and keep up, at least one agent in each Congressional district in the United States, and one in each of the territories belonging thereto; he shall appoint no person, as agent, in any state or territory, except such persons be of known probity and integrity. It shall be the duty of the agent, appointed by the President, at all times, to keep, and preserve a supply of genuine vaccine matter, and to supply the same to the agents, by him appointed, in the several states and territories, and to the army, navy, and to any department of the United States, when requested, by any person in the service of the United States. It shall be the duty of the agents, in the several states and territories, to supply the vaccine matter to any officer or person in the service or employment of the United States, who shall require the same, residing in the state or territory to which such agent belongs. It shall also be the duty of the several agents, in states and territories, to furnish and supply said vaccine matter, in a pure state, to any citizen of the state or territory in which such agent shall be located. It shall be the duty of

the agent of the United States to publish, from time to time, and transmit, to state and territorial agents, proper directions for using said vaccine matter. No agent, appointed under this act, shall, during the time he continues in office, keep or use any smallpox matter; and each agent, appointed under this act, shall, before he enters upon the duties of his office, take an oath, or affirmation, well and faithfully to perform the several duties and provisions of this act, as far as they relate to his agency.

SEC. 2. *Be it further enacted, by the authority aforesaid*, That the President of the United States, as soon as he shall make an appointment under this act, shall cause due notice thereof to be given to the people of the United States; and that the United States' agent shall cause like notice to be given, as soon as he shall have appointed the state and territorial agents. That the several agents who shall be appointed under this act, and who shall enter upon the duties thereof, may transmit, and receive, through the United States' mail, any letter or packet of vaccine matter, or relating exclusively to the vaccine subject, and which shall not weigh more than one ounce, free of postage, provided all such letters or packets shall be marked with the word "vaccine," and subscribed by the agent or person sending the same.

SEC. 3. *Be it further enacted, by the same*, That the several departments of the United States, as soon as may be, after the passage of this act, shall make such rules and regulations as, in their opinion, shall be best calculated to secure the benefits of vaccination to all persons in the United States' service, in their respective departments; and it shall be the

duty of the head of each of the said departments, to cause said rules and regulations to be strictly observed.

SEC. 4. *Be it enacted by the authority aforesaid*, That, if any person or persons shall transmit, send, or give out, or aid or assist in transmitting, sending, or giving out, to any citizen of the United States, any variolous or smallpox matter for, and as, vaccine matter, every such person or persons, on conviction thereof, shall be fined in any sum not exceeding five hundred dollars, and shall be imprisoned for any term not exceeding six months, or both at the direction of the court.

SEC. 5. *Be it enacted, by the same*, That, to the agent of the United States, to be appointed under this act, there shall be paid, out of the Treasury of the United States, annually, during his continuance in office, the sum of dollars; and that the several agents of states and territories, to be appointed under this act, shall be entitled to receive of, and from every applicant, the sum of and no more, for every packet of genuine vaccine matter sufficient to vacinate provided that the several agents above named shall receive no compensation for any vaccine matter to be furnished to the army, navy, or to any department or person in the service or employ of the United States.

Letter from Dr. Smith to Dr. Waterhouse.

Vaccine Institution, Baltimore, April 6, 1224.

DR. BENJAMIN WATERHOUSE,

Cambridge.

SIR,

I feel myself compelled to call upon you, to come forward and state openly to the world, over your own signature, whatever you have to say against my method of conducting vaccination, against me as a private individual, or against my proceedings, while acting lately as agent of vaccination for the United States.

A friend has lately put into my hands a number of anonymous essays, taken from the Boston Patriot, which bear so much intrinsic evidence of your authorship, that I must consider them as verily yours, unless furnished with reasonable proof to the contrary. These essays contain many invidious and unjust remarks relative to Dr. Smith of Baltimore; while they are at the same time preposterously extravagant in praise of "Dr. Benjamin Waterhouse," who, it is said, "has devoted his time and powers to the great object of striking out from the miseries of life one of its greatest evils," who "goes on to throw light on the subject of vaccination without considering whether he has served a grateful public or otherwise." I am represented as "being in a fog;" "aground from my own want of knowledge;" "wanting a pilot;" and with evident marks of exultation, "as having got the business of vaccination into a snarl;" and you also ask, "is it not strange that Dr. Smith in all his perplexity" (alluding to the introduction of the Small Pox into North Caro-

lina) "has never written to the Jenner of America, who has most experience in vaccination, and to whom we are all indebted for its first introduction into America!"

All these pretty encomiums, sir, appear to have been passed so much to your satisfaction, that I have copied them again as so many beautifully coloured rays of light shed abroad by you to disperse the clouds of ignorance in which you have represented me to be so entirely enveloped.

But to account to the public more certainly for the production of these curious essays, I will take the liberty to make some quotations from certain letters written by you in 1817, to a distinguished member of Congress, Dr. Condict, whose duty it was at that time to examine me fully and impartially on all the difficulties in vaccination referred to in your letters. He was under the necessity of allowing me a copy of these letters; and if you should think my extracts from them partial, I will furnish them at any time entire for publication.

In one of these letters, which bears date January 17, 1817, and which was evidently intended to deny the correctness of my method of practice in vaccination, and to condemn the use of the vaccine scab, you say the question has been put to you an hundred times, viz. "How happens it that you who first introduced the vaccine matter, and who first tried the experiment on your own children, and who fought its battles, till you overcame its enemies, and who has and still continues to disperse the kine pock matter throughout this land; and all over the world; how happens it that you are not considered the vaccine agent? To this often re-

peated question you say you have answered, Yankee fashion, by asking another, namely, how happens it that when a man climbs up an apple tree, and shakes down the fruit, that there is often found some rogue of a boy *beneath* him, who shall snatch up the apples and run off with them? The history you add of discoveries and inventions is full of such mortifying instances."

In reply to these insinuations, aimed at me as the vaccine agent of the United States at that time, I have only to inform the public plainly that I never was indebted to you in my life for a particle of the vaccine matter, or for any knowledge of the kine pock that I possess. The law to encourage vaccination originated at my request, and from original information that I communicated to congress, founded upon the use which I was the first to make of the vaccine scabs *which you condemn.* Why you therefore should have undertaken to represent me as so great a rogue in vaccination, or as wearing your hard earned laurels, I am at a loss to discover. But after congress had approved and adopted *my plan*, it would have been extraordinary, indeed, if the President should have interfered and appointed you "the agent" to carry it into effect, especially as you have since shewn in your own letters, that you do not possess that knowledge of the vaccine scab which is essentially necessary to enable any person to execute it with safety to the public. "Yankee" modesty itself, I think, might blush at these your unjust *pretensions.* But to waive for the present any serious discussion of your merits as a Vaccinator, I will simply state, that I am entirely ignorant of any discoveries, inventions, or improvements made by you at any time in the business of vaccination.

It is true that you were so fortunate as to succeed with the first portion of matter imported into America, *2nd July*, 1800, and between this date and the autumn following, you inform us you had inoculated about "fifty" persons. Your matter then, you say, became "*deteriorated*," and you add, that you were obliged to abandon vaccination until you got another supply of matter from England, which you did not accomplish until the spring following. About this time, however, a packet of genuine vaccine matter was also received in this city, and with it "*on the first day of May*, 1801," I introduced the kine pock into Baltimore, before it was seen in any other place in the United States, beyond the confines of Boston; and from this time the genuine vaccine matter has been always kept pure and active in my hands. I have never lost or changed my original stock of this matter; neither have I ever neglected to watch over it, to prevent its deterioration. But I have preserved it carefully, and I have the genuine matter still perfect and free from every impurity. If you therefore have been so fortunate as to succeed, *first*, I am willing to leave it to others to determine the question fairly between us, whether I have not succeeded *best*.

I regret only, sir, that you should have so frequently indulged yourself to excite vulgar prejudices against me. I have had battles enough to fight with the enemies of my institution, among the prejudiced and illiberal part of the faculty, who it would be impossible to reconcile to any method of practice, that threatens to interfere with their business, or lessen the profits of their profession. But from you I flattered myself, that I had only to expect a candid

exposition of my errors, should you be so fortunate at any time as to detect them. And for any such service as this, there is no one who would be more obliged to you than myself. But I cannot be so regardless of my own feelings, or the welfare of others, as to allow you any longer, or on any account, to misrepresent either my character or method of practice, without making some attempt to defend myself against such serious injuries, as I may receive from the weight of your authority, and the disingenuousness with which you wield your pen against me.

You, may wish to raise yourself in the esteem of your countrymen, I have no doubt, by showing your proper qualifications, to serve them as "vaccine agent;" and I can have no objection to your exercising an ambition so laudable. But if you wish to preserve my respect or esteem, you must show wherein I have acted wrong, *over your own signature*, before our countrymen, whose very humble servants we are, and who, we may be certain, will do us equal and exact justice, when they are more fully informed on this subject.

It is unfortunate, sir, I think, for us both, that you should have so soon forgotten the correspondence, we had when I first discovered you were privately endeavouring to make an unfavourable impression towards me upon a committee in Congress, who had the business of vaccination, at my request, under their consideration. I then wished Congress to make provision for the *free distribution* of the vaccine matter, and if I could have prevailed on them to adopt my plan, we would have prevented, I believe, all the sufferings and losses, deaths and confusion, that has

since prevailed throughout the United States, on account of the small pox. But I had your influence and authority to contend against, as well as the influence and authority of many other respectable physicians; and no provision was made to encourage vaccination. You then objected to the use of the vaccine scab, and advanced your own experience in such bold terms against my method of practice, that you entirely overbalanced the little influence I had, and Congress deemed it inexpedient to act at all on the business.

You observed in your letter to Dr. Condict, fifteenth January, 1817, "that some gentlemen in the south have said, they could determine the genuineness of the preceding distemper, by the aspect of the scab produced by it." And "*if this be true*," you added, "I confess I am willing to yield the palm to them!!" But when I informed you candidly that such was the fact, and that I would willingly enter with you into the discussion of the principles, on which this method of conducting vaccination was founded, you evaded my invitation, and withdrew yourself as far as you could from the field of dispute, leaving me to enter into a controversy, with a person unknown to me—you referred me to *Sylvanus Fancher!!* and observed, "the correctness of my practice, could only be determined by submitting the patients who had been vaccinated with these scabs to the test of the small pox!" But, sir, this was an experiment that had been made by so many persons, and repeated so often, year after year, that I did not think it worth while to address you again on a subject, to the real merits of which you appeared to be so perfectly insensible.

But as these past scenes appear to be obliterated from your memory, and as your friend *Dr. Nathaniel Potter*, of this city, professor of the theory and practice of medicine in the University of Maryland, teaches to the rising generation of physicians that you are verily the "*Jenner of America*," I will clear the arena for you again; and however dubious I consider the authority of our professor, on any question connected with vaccination, I will enter fully with you at any time into a discussion of the proper use of the vaccine scabs. I make this proposition, not so much for my own gratification, as to correct *your mistakes*, and to fortify the public confidence in vaccination, against the discouraging doctrines of Professor Potter himself, relative to the kine pock. See his work on Contagion, page 114, where Dr. P. says, "it is problematical, whether vaccination is a certain prophylactic for the small pox or not." See also his letter to me, of fifth February, 1822, republished in the Vaccine Inquirer, No. 2; wherein he has given it as his opinion, that "if there has been any criterion discovered, by which we can pronounce a subject completely guaranteed against the invasion of the small pox by vaccination, it is to be found in that insensibility to the vaccine virus, which is the result of *repeated vaccination*, till not even a local vaccine inflammation can be excited."

But I will be candid, and inform you before hand, that if you should ever indulge again in any anonymous attack upon me, I will forever thereafter consider you as an ungenerous enemy; and will then endeavour to prove to you, "that Dr. S. is not in a fog," as you have represented; but that he always sails

his own ship, without "a pilot" even in the most stormy weather. Dr. S. only regrets, that his ship has been unhappily so much injured, by the torpedo,* that was late exploded under him in this city. But the main timbers of the "*Baltimore*" being well seasoned with truth and candour, remain uninjured; and she is ready to meet the "*Cambridge*" in any latitude you may appoint.

I will annex to this communication a copy of my letter to you of the 3rd February, 1817, and your answer thereto, to serve as an introduction to the discussion herein proposed, if agreeable to you.

I have the honour to be, with great respect,

Your obedient and humble servant,

JAMES SMITH.

Late Agent of Vaccination for the United States.

Letter from Dr. Smith to Dr. Waterhouse.

Vaccine Institution, Baltimore, Feb. 3, 1817.

DR. BENJAMIN WATERHOUSE,
Cambridge.

DEAR SIR,

Through the politeness of the Hon. Lewis Condict, I have been favoured with the perusal of two of your letters to him, on the subject of vaccination, from which it would appear, that your experience relative to the use of the vaccine crust, has led you to form conclusions very different from those which I have adopted, and which, if true, must be considered as completely subversive of the principles upon which I am conducting

* The introduction of the small pox into North Carolina, and the consequent repeal of the law to encourage vaccination.

the general Vaccine Institution, for the use of the citizens of the United States. These principles are, therefore, important, not only to ourselves, but to our fellow citizens generally. They are the only principles upon which I could be able to furnish the genuine vaccine matter, or would be willing to induce the public to place their dependence on vaccination, as a certain infallible "ever during shield" against small pox.

I feel solicitous, sir, for the honour of your correspondence on this subject; but cannot promise you any great or acceptable return for the rich harvest of information, which I would hope to gather in from so distinguished an author, and personal friend of the illustrious Jenner, as Dr. Waterhouse.

To "literary or scientific honours," I can lay no claim, none have been ever merited or bestowed on me; and my name cannot be supposed to be known beyond the sphere of my own private and official duties. But however unknown in the world, or limited in my acquirements, I still feel that I am possessed of an ardent desire to discover TRUTH in every field of my research; and in no pursuit am I more anxious to acquire this invaluable gem, than in that in which I am now publicly and most solemnly engaged. If, therefore, in your opinion, I have adopted erroneous and dangerous principles, (at least so far as regards the determining the genuineness of the preceding distemper by the aspect of the scab produced by it,) or if you believe I have fallen into a gross mistake, by giving a decided preference to the use of the scab, instead of the eighth day limpid fluid; and that by these mistaken opinions and dangerous practices, I may be inducing any one into a delusive hope of security

against small pox; I hope you will be more explicit in the detail of your experiments, than has been given in the letters before me; and that you will communicate to me your more accurate views and observations with as little delay as practicable. I do not ask this development of your opinions, as if I had any just claim to them, but I solicit a free discussion of our widely differing modes of practice, as a favour from you, which will greatly oblige me.

Whilst I invite, however, this liberal and friendly discussion of a topic of much concern to the community, in which we live, and to mankind in general, may I not intreat you to be plain, to be honest with me? to be just? to be candid before our countrymen? to be generous to your weaker adversary? and to remove the cloud which you believe obscures my view, and exposes to danger the lives of so many of our fellow-citizens.

With great respect for Dr. Waterhouse, whose high reputation and elevated rank among professors has been long known to me, I remain his most

Obedient and humble servant,

JAMES SMITH.

Letter from Dr. Waterhouse to Dr. Smith.

Cambridge, February 26, 1817.

Dr. James Smith,

Dear Sir,

I am under obligations to the honourable Mr. Condict for your letter of the third instant. I received it with pleasure, and read it with satisfaction. Per-

haps I ought to say, that its reception, together with his, I account among the most pleasant occurrences of my life, inasmuch as they removed some erroneous ideas I had, through misinformation, entertained. I hope and believe that the object of all three is *truth and the good of mankind.*

It seems that you and I differ somewhat in opinion, relative to the efficacy, or rather infallibility of the scab or crust. I once had a better opinion of that concretion of lymph and virus than at present. My doubts have been the result of experience. It is about fifteen years since I published, in my Treatise, my theory of the *genuine* pustule, the *spurious* one, and the *scab*. I hope for the benefit of the world that I am wrong, and that your opinion of the efficacy of these crusts or scabs is right. It can only be determined by submitting patients, who have been vaccinated with them, to the test of the small pox.

I believe there is no man any where, who has made so many experiments with the vaccine matter, in all its forms, or vaccinated more, than Mr. Fancher. On the receipt of Mr. Condict's letter, I wrote to him. In reply, he narrates a series of facts, coinciding with my own experience, and concludes in these words;

"I do now frankly confess, that I never make use of the vaccine scab, but I tremble for the reputation of this blessed discovery, and my own reputation; at least if it is not in my power to see my patients in less than a week."

I have a respectable opinion of Mr. Fancher's talents, integrity, and disinterestedness. I know not which to admire most, his industry, or his generosity.

You would be surprised to see his immense collection of scabs, and the mode he pursues to preserve them from decomposition in a moist and warm atmosphere.

I have patronised this gentleman solely from the opinion I had formed of his sagacity, industry, and philanthropy; and I have encouraged him to make numerous experiments to determine the efficiency of the vaccine virus in all its forms, and the result has been the confirmation of my first idea, viz. that of the fluid on the eighth or ninth day being preferable to all others. I wish, however, to see this thing determined by fair experiment.

You estimate, I suspect, literary and scientific titles and honours, so called, higher than I do. I hold them as nothing when brought in competition with unadorned truth, and real utility. I should be pleased to receive your ideas on the interesting subject of your letter; for the oldest of us have much to learn in every branch of medicine, as well as in this wonderful part of it, the commutation of a *terrible* disease, for one of the *mildest.*

I beg you to accept the friendly and respectful salutations of

Dear Sir,

Your obliged friend,

And humble servant,

BENJ. WATERHOUSE.

Vaccine Institution, Baltimore, April 28, 1824.

To Mr. Gideon B. Smith,
Editor of the Vaccine Inquirer.

Sir,

I deem it proper to inform you, that I have lately received a very unexpected acknowledgement from a member of the Committee in Congress, appointed 8th March, 1822, to inquire into the facts connected with the unhappy introduction of the small pox into North Carolina.

This gentleman, Hon. Thomas Whipple, writes me from Washington, on the 3d inst. and says, "The Committee did not examine the circumstances of the unfortunate occurrence at Tarboro' in North Carolina, with any view to criminate you, nor did they from any evidence laid before them come to the conclusion that you were reprehensible on account of what happened in that quarter; but, on the contrary, believed that you were blameless in that affair."

Upon what evidence then did the Chairman of this Committee, (Mr. Burton,) charge me on this occasion with having "slaughtered with indifference" so many of my fellow creatures in North Carolina? and why was the law to encourage vaccination repealed by Congress on this account? Mr. B. it is hoped, will yet furnish the public with the evidence upon which his assertions were grounded; if he has any evidence to produce. At present I will only add, that if he can satisfy his own mind that he is not to blame for all the fatal consequences that have followed the repeal of this law, I will forgive him all the injuries I have sustained for his personal hostility and criminal conduct towards me.

I am, your friend and ob't servant,

JAMES SMITH.

National Vaccine Institution.

To Subscribers to the Nat. Vac. Institution.

Some misunderstanding having occurred with certain subscribers to this Institution, in consequence of the misstatements that were made in Congress relative thereto, about the time that the law "to encourage vaccination," was repealed, I deem it proper to submit to you the following extracts from the prospectus of this Institution.

"*Art.* 1. Any physician or other citizen of the United States, subscribing to these proposals, and paying not less than ten dollars, shall be entitled to a constant supply of the genuine vaccine matter, as often as the same may be wanted, free of any costs or charges, until first day of Jan. 1823.

"*Art.* 2. Voluntary donations will be received, if forwarded to the undersigned through the medium of the post office, by any citizen of the United States, to be applied towards establishing and supporting a National Vaccine Institution in the City of Washington. Should this attempt nevertheless fail to receive that encouragement from the public, upon which alone any hopes are now entertained, that an effective vaccine institution can be established and supported, the whole amount of *donations* received shall be returned to the several donors, who may have paid the same."

These proposals were published in 1818, and forwarded to many different persons in the United States, and donations and subscriptions were accordingly received by me from many persons, whose names and places of residence, as well as the several sums given or subscribed, are all carefully registered in my books, and can be referred to at any time.

A number of special agents were also appointed by me and sent out expressly "to distribute the genuine vaccine matter, and to vaccinate gratuitously," all who pleased to take advantage of my offers to serve them. We vaccinated the rich, as well as the families of the poor. But it is now to be regretted, it appears, that in this way I gave offence unintentionally to many physicians, who considered my proceedings as a hostile interference with their particular business. We persisted, however, in this work, and from the most accurate calculations I can make of the number of persons we vaccinated, (including those for whom I operated myself, free of any charge, in this city and in other places,) we secured from the small pox upwards of one hundred thousand individuals, during the period of five years, for which I undertook to preserve and distribute the matter as above.

From documents that have been made out, properly authenticated, and deposited in the office of the Secretary of State, it appears that previous to the sixteenth April, 1822, the sum of $40,167 was subscribed to my proposals, and that out of this amount, the sum of $22,337 was collected by my agents, from 6235 subscribers, to whom they rendered 6750 days' service, under my superintendance.

From this date up to the twenty-first February last, the further sum of $2,928 has been collected, making in the whole $25,265 received by me; out of which sum the daily expenses and wages of the special agents I employed were all paid.

Of the small sums sent to me, and entered as donations on my books, the chief part was either intended at first, or was afterwards converted by the donors themselves, into subscriptions for a supply of matter for their own use. On which account, the whole amount subscribed and paid to me, has been included in one general account, subject to correction at any time by the individuals concerned.

There is another cause of dissatisfaction still prevalent among some of the good people of this state which it may be proper to explain.

It is verily and simply this, that in the winter of 1809—10, when the small pox was exceedingly prevalent, I applied to the Legislature of Maryland for their aid, and offered to furnish the genuine vaccine matter, with proper directions for its use, to the citizens of the state generally, if they would allow me for this service $1000 a year, for three years. I then also assured the Legislature, that if they would grant my request, I had no doubt but that I would be able thereby to extirpate the small pox from among us. My "project," however, was considered by the Legislature as too "speculative and chimerical," to entitle me to any solid or *certain* reward for the attempt; but wishing to encourage vaccination, they granted me in lieu of my request, the privilege of raising $30,000 by lottery, clear of all expenses, if I would engage to use my best exertions, and would furnish the matter for a period of six years. The public took a lively interest in this lottery, and I received out of the proceeds of the same, the nett sum of $12,797..20, which the managers paid to me, in part of the compensation due to me by the state, for the services I performed. Instead of thanking me, however, for having accomplished my "chimerical project" with the means I derived from this Lottery. The enemies of my institution now deceive the people, and say that I have drawn $30,000 of their money from them, for which they are not to receive any benefit!" The unthinking are thus ignorantly led to curse the hand who has relieved them.

If there is any subscriber to this Institution, however, or any other individual, who may want any further information from me on any subject herein referred to, I beg he will ask of me direct, and he shall be more particularly informed. And if there is any dissatisfied person, who can show that I have failed in any particular to perform my whole duty, whatever subscription or sum of money any such person may have paid me, shall be returned to him forthwith.

JAMES SMITH.

General Vaccine Institution,
Baltimore, May 1, 1824.

Postcript.

The genuine Vaccine Matter is preserved and regularly dispensed from this Institution as heretofore.

J. S.